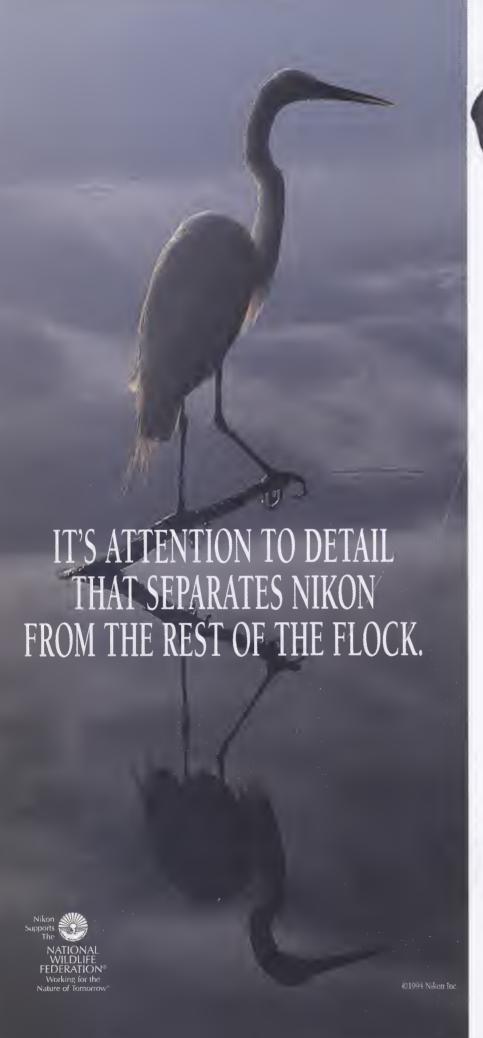
## ING BIRD

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WINTER 1995





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## LIVING BIRD WINTER 1995 VOLUME 14 NUMBER 1

#### **Greetings from Sapsucker Woods**

It's amazing how often I run into Lab staffers during afterwork hours. Whether I'm going to a movie with my wife, wandering through the Commons downtown with my kids, or even flyfishing at dawn on Fall Creek, wherever I go in the Ithaca area I meet friends from work. Even so, I couldn't help being surprised when I visited Mount Pleasant late one night.

I was supposed to meet Bill Evans, a Lab research associate, near the astronomy observatory at the top of the hill. Bill is working in conjunction with the Lab's Bioacoustics Research Program to develop computer software that will automatically identify the night calls of migrating birds. His truck was nowhere in sight.

This was a rare cloudless night in Ithaca and the observatory was in full swing. Occasionally the building would rumble as its massive domed roof moved to point the telescope at another star. What a strange night, I thought, as I walked into the pitchblack field; the kind of night you expect a UFO to whisk you away to a faraway planet.

Standing still with my eyes closed, I listened to the calls of migrating birds: the catlike sounds of thrushes; the *pink* notes of Bobolinks. Suddenly I had the eerie feeling I was not alone. I opened my eyes just as a disembodied voice inquired: "Who is that?" Several people laughed when I answered.

Martha Fischer and Margaret Barker, fellow staffers in the Lab's Education and Information Services department, and some local birders had been standing there silently as I walked into the field. Later Bill Evans arrived and we all stayed well into the night, trying to learn night call identities from him.

I couldn't help thinking while driving home later, this could only happen in Ithaca.

— Tim Gallagher Editor-in-Chief

Cover: Looking as crimson as the nearby holly berries, a male Northern Cardinal weathers an icy winter storm. Learn how you can attract these popular visitors and other colorful songhirds to your yard. Story on page 26. Photograph by Gay Bumgarner.

Right: Scientist and artist John O'Neill both discovered and painted the first portrait of this rare parrotlet (*Nannopsittaca dachilleae*). Profile on page 32.

Back Cover: A shy, secretive, largely nocturnal bird, the American Woodcock is a common resident of moist woodlands and thickets in the Eastern United States. A few individuals, like this one, remain through the winter in the northern part of their breeding range. Photograph by Craig Mokma.

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# Departments Columns In the Field by Jack Connor Leave your field guide behind. Profile by Cynthia Berger The art and science of John O'Neill. Flying Field by Mel White Science versus sympathy. The Catbird Seat by Pete Dunne Confessions of a nature center naturalist.

#### **LIVING BIRD**

WINTER 1995 VOLUME 14 NUMBER I

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Living Bird, ISSN 1059-521-X, is published in December, March, June, and September by the Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, New York 14850. Telephone: (607) 254-BIRD. Living Bird is free to members of the Laboratory, a nonprofit, membership organization dedicated to the study, appreciation, and conservation of birds. For more information please write to our Membership Department. Membership is \$30 a year. The Laboratory assumes no responsibility for unsolicited photographs or manuscripts. © 1995 Cornell Laboratory of Ornithology.

Printing by Cayuga Press, Ithaca, New York.

Color separations by Brodock Press, Utica, New York.

A Printed on recycled paper.

#### Letters

#### BEAUTIFUL BOOKS

I have enjoyed many of the articles in *Living Bird* over the years, but one article in your Summer 1994 issue really caught my interest. That was Jane Hardy's "Birding by the Book." Oh, how I would love to come and see the beautiful rare books that are housed in your collection.

June Boettcher Ellenton, Florida



Library director David Corson and assistant curator Margaret Rogers inspect some of the treasures included in Cornell's Hill Ornithology Collection.

#### SPANISH BOOKS

I recently read "Counting Birds in Honduras," by Marcia Bonta (Winter 1994). The article mentioned that the *Guide to the Birds of Panama, Costa Rica, Nicaragua, and Honduras* by Robert S. Ridgely and John A. Gwyne was available only in English.

There is an edition of that same book entirely in Spanish. I have a copy, which I purchased at the Smithsonian Tropical Research Institute (STRI) in Panama in December 1993. I don't know whether or not it is available in the United States, but you can order it from STRI or the Panama Audubon Society. The book cost me \$34.00 (U.S. dollars).

By the way, I enjoyed the article very much.

Daniel Christian Shelburne Falls, Massachusetts

#### In Living Color

Regarding the birds pictured in "The Unappreciated Pigeon," by Alexander Skutch (Summer 1994):

In pigeons the genes for the three major plumage colors (ash-red, blue, and brown) are located on the sex chromosomes. The male pigeon has two genes for color on his sex chromosomes; the female has only one. Ash-red is dominant to blue (the color of the wild-type pigeon on page 31), which in turn is dominant to the third major color, brown.

Knowing this, I can tell that the pigeon pictured on page three is a male ash-red check. The black ticking in his primary flight feathers indicates that he is heterozygous for the major colors—he has one gene for ash-red and one gene for blue. A female, because she has only one color gene, could never have this color combination. The genes for the check and bar patterns are not on the sex chromosomes and so can be seen in birds of either sex.

The color of the bird on page 35 is identified as "mealy"; however, so far as I know this term is used only in conjunction with ash-red. The bird looks to me like T-check blue grizzle with some hronzing, but no ash-red.

Sumner H. Fuller East Hartford, Connecticut

We welcome letters from readers. Address letters to: The Editors, Living Bird, 159 Sapsucker Woods Road, Ithaca, New York 14850.

#### BirdNews

This past June, more than a thousand ornithologists converged in Missoula, Montana, for an historic occasion—the first-ever joint meeting of all three major professional ornithological societies. Members of the American Ornithologists' Union, the Cooper Ornithological Society, and the Wilson Ornithological Society assembled on the University of Montana campus for six days of cutting-edge bird science—reporting their latest discoveries and discussing conservation challenges and research needs for the future. We present here just a sampling of the more than 500 talks, seminars, and posters that made this meeting so fascinating.

#### KEEP YOUR DISTANCE

The 34,000 pairs of Adélie Penguins that breed on Antarctica's well-named Cape Bird often lose eggs and chicks to the hungry South Polar Skuas that nest nearby. According to University of New Mexico graduate student Julie Hagelin and professor Gary Miller, wandering Adélies sometimes turn the tables on the predators and trample skua eggs.

Hagelin and Miller developed a model to predict the optimum distance between a skua nest and a penguin colony. The researchers ranked the 170 skua nests on the Cape for

safety (the farther from penguin pathways, the safer) and access to prey (the fewer skua territories a bird must cross to reach a penguin meal, the better). At the intersection of these two sets of values lay the theoretical "optimal distance."

How did theory compare with reality? When Hagelin and Miller tracked skua reproductive success, they found that in each year of the four-year study, the birds lost 35 to 50 percent of their eggs. Other skuas ate some, but up to 28 percent got crushed by roaming penguins. Skuas had the lowest reproductive success in the years when they lost the most eggs to penguins.

Hagelin and Miller then compared actual skua-nest distances-to-penguins to the birds' reproductive success. Skuas fledged the most young when they nested 25 to 30 meters from the penguins—a value very close to the predicted optimal distance.

#### VEHICULAR SELECTION

A nyone who drives a car knows that many birds meet an untimely end on the road. But just how many? No one has ever counted. So, for the past seven years Allegheny College professor Ron Mumme has made road kills a part of his research program.

Mumme is concerned about the

effects of speeding cars on Florida Scrub Jays, a species that lives only in dwindling areas of oak scrub habitat. Working at the Archbold Biological Station, he compared death rates between a group of jays that held roadside territories and a control group living away from the highway.

Looking at breedingage birds, Mumme found that the roadside population had an an-



A Florida Scrub Jay gets a bird's-eye view of Ron Mumme.

nual mortality rate of 40 percent—nearly twice the death rate of the off-road jays. And experience seemed to make a difference—more than 50 percent of the birds died in their first year on the road. After that, roadwise birds seemed to survive about as well as the control population.

Mumme plans more studies to determine whether older jays have actually learned to avoid traffic, or whether natural selection by unnatural objects has simply eliminated the most vulnerable birds, leaving only road-wary survivors. Meanwhile, he worries: Even though oak scrub for the threatened species is in short supply, roadside habitat might be a "population sink"—killing more birds than it produces.

#### MANY EYES

If you were walking in the woods and unexpectedly met Steve Lima, you might wonder what he was doing. The Indiana State University professor hides inside a large box while he rolls small rubber balls down a narrow ramp toward a feeding flock of Dark-eyed Juncos and American Tree Sparrows.

The bizarre ball machine is Lima's ingenious invention for prodding the assumptions behind the "many eyes" hypothesis. This ecological truism states that feeding in flocks gives birds an advantage: with many eyes watching for predators, each individual spends



Julie Hagelin demonstrates the optimal distance for studying Adélie Penguins.

less time on the lookout and more time eating. An assumption behind the hypothesis is that if a single bird  $\frac{\pi}{2}$ reacts to a threat, everyone else in the flock will notice.

In one set of tests, Lima aimed the ramp so that only a single "target" bird could see the ball coming, then videotaped the flock's reaction. In 69 separate ball attacks, each target bird reacted by looking alert, then flying to cover—but only 4.1 percent of its flockmates showed the slightest reaction to their sentry's behavior.

To demonstrate that a rolling ball really is just as scary as a rushing raptor, Lima also "flew" a stuffed kestrel down his ramp, with the same results: only the target bird flushed.

Another set of tests showed that when the ball was aimed at not one but several birds, they flushed simultaneously—and so did other birds in the flock. Lima concludes that it takes more than one bird to sound the alarm.

#### A BETTER BIRD COUNT

Q uppose you're monitoring a song-Dird population. How do you get a head count? One common technique is to listen for singing males, then double the number you hear to get the total number of breeding birds.

There's just one problem with this method, says Dalhousie University professor Cynthia Staicer: some males never find a mate. If you assume each singing male represents a pair of birds, you risk overestimating the population.

Staicer and collaborators Victoria Ingalls of Marist College and Tom Sherry of Tulane University set out to build a better bird count. After years of listening in the field, they suspected that a male's song can reveal his paired or unpaired status as concisely as the codes in a personal ad. If female songbirds can decipher the code, so could biologists.

To test this idea, Staicer and Ingalls shouldered tape recorders and collected song samples from more than 100 male American Redstarts. Then they compared each bird's singing style to his pairing status.

The results were clear: Bachelor males



Cynthia Staicer stalks singing American Redstarts.

usually sang in *repeat* mode, persistently spouting a single song with a fast, regular cadence. Paired males sang repeat mode more slowly than bachelors did-five versus eight songs per minute. But they were far more likely to sing in serial mode, switching back and forth between two or more songs, which they sang faster—10 songs per minute but more sporadically.

The potential for applying these findings to bird censuses is exciting. Meanwhile, Staicer is examining whether other aspects of a bird's life, such as territory quality, number of neighbors, and nesting stage, might also be revealed in song.

#### OF CONES AND Crossbills

The lower part of a crossbill's unusual, X-shaped beak may curve either to right or left. In human populations, right-handedness is much more common than left-handedness, but in Red Crossbill populations the ratio of right- to left-beaked birds is 1:1. New Mexico State University professor Craig Benkman wondered whether this ratio was a consequence of the birds' foraging behavior.

Benkman knew that right- and leftbeaked birds orient themselves differently when they perch next to a

cone; as a result, they reach different seeds. What's more, crossbills forage in flocks, and instead of cleaning out a cone in one visit, they'll take a few seeds, move on, and come back later. Benkman reasoned that flocks with equal numbers of right- and left-beaked birds would forage more efficiently because they'd minimize the overlap in their use of cones.

To test this idea, Benkman wired an empty pinecone to a branch and rounded up 10 Red Crossbills-five left-beaked and five right-beaked. In a series of aviary trials, he hid four seeds in the cone and let a bird forage until it ate two seeds. Next, he let a second bird forage. Time analyses showed that crossbills found seeds faster when they followed an opposite-beaked bird than they did in the wake of a same-beaked bird.

What do these results mean? If, long ago, the crossbill beak ratio was once different from 1:1, birds with the rarer beak type would have an advantagethey'd find food fast. Over time, natural selection would favor the rarer beak, until the two beak types were equally common in the population.

#### Polyunsaturated HABITAT

n spring New Hampshire's Hubbard L Brook Experimental Forest resonates with the I am so la-zee songs of male Black-throated Blue Warblers who are (contrary to the mnemonic for their song) energetically claiming territories. Not every male gets to breed, though, and years of field work by various scientists suggested "habitat saturation"—not enough high-quality territories to go around. The evidence for habitat saturation? If you remove a breeding male from his territory, another male quickly takes his place.

But Dartmouth College graduate student Peter Marra and professor Dick Holmes weren't satisfied with this explanation. Classic "removal experiments" removed males but left females on the territories. Perhaps, Marra and Holmes thought, these females were attracting new mates. In other words, females, not habitat, might be the limiting factor. It was time to do



Are females a limiting resource? This male Black-throated Blue Warbler did find a mate.

the second part of the experiment.

On one set of eight territories, they removed only the male warblers. In another set of seven territories, they removed both males and females. The results were clear-cut: where the males were removed, eight more males quickly replaced them. But where males and females were removed, no new birds moved in.

As additional support for the "females are limiting" theory, Marra and

Holmes note that in many songbird species (including Black-throated Blue Warblers) males are more numerous than females. Why? Perhaps more females die during the breeding season, especially once they start flying to and from the nest to feed young. Other preliminary evidence suggests that females settle on wintering grounds in the tropics that are drier and less productive than the turf staked out by males.

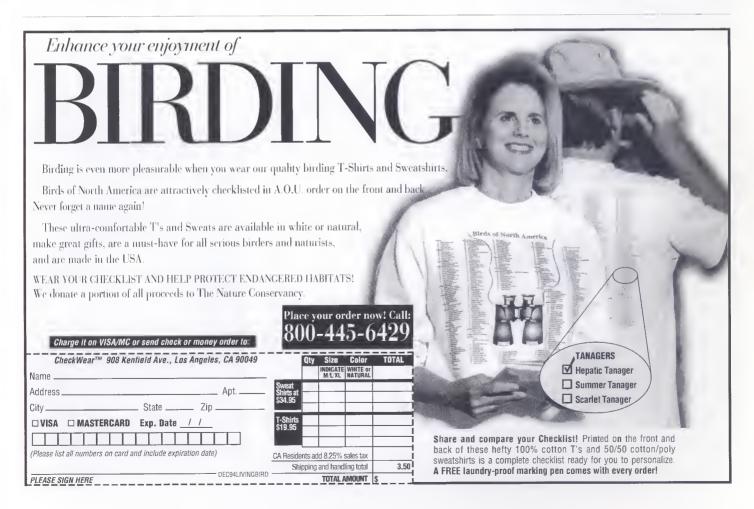
#### WREN VERSUS WREN

When Albion College professor Dale Kennedy and collaborator Douglas White were instructors at Kansas State University, they maintained a nest box trail on the Konza Prairie Research Natural Area. Each year, Bewick's Wrens and House Wrens moved right in, and the two species seemed to coexist peacefully, contradicting the notion that aggressive House Wrens might be responsible for recent, mysterious declines in some Bewick's populations.

But things aren't always what they seem. For three years Kennedy and White kept track of each wren pair's success in hatching eggs and fledging young. They also measured wren aggression by placing a dummy nest near each nest box, then monitoring the fate of the two House Sparrow eggs stashed inside.

The results? Bewick's Wrens ignored the dummy eggs, for the most part. But House Wrens—males that were unmated, or females that hadn't yet laid eggs—punctured or removed every dummy egg. And their aggressiveness extended to real Bewick's nests—often, when Kennedy and White discovered ruined Bewick's eggs, they saw a male House Wren perched conspicuously nearby, singing. Over the course of the study, Kennedy and White attributed 81 percent of all Bewick's nest failures to House Wrens.

These results suggest House Wrens are indeed directly responsible for the Bewick's decline. Even small numbers of unmated male House Wrens, says Kennedy, can do serious damage.



#### FIGHTING FIELD GUIDE **OVERLOAD**

by Jack Connor

#### Take the frustration, but not the thrill, out of bird identification

ncouraging new birders to use a field guide seems as natural as asking a class of novice swimmers to splash water on their faces, but anyone who has led a bird walk for beginners has seen field guide overload take its toll.

"Meadowlark!" we shout. "See that black 'V' and those white outer tail feathers? . . . Cliff Swallow-watch for the rusty rump patch . . . Bobolink—hear that bubbling song?" By the third or fourth species most people in the group have stopped lifting their binoculars and, heads down, are thumbing back and forth through the field guide—complete with 500+ species in taxonomic order, juvenal/female/male plumages, breeding/wintering ranges, bill colors, wing bars, upper mandibles, undertail coverts, confusing fall warblers, look-alike sandpipers, impossible flycatchers, and all the resttrying to find something to match one of the birds they have only glimpsed.

By the tenth or twentieth species enthusiasm is waning, fatigue is waxing, and the group is beaten. "How can anyone possibly remember all this stuff?" they ask. "Why don't they put these birds in alphabetical order?" "When do we eat?"

Some novices recover quickly, of course, and come back better prepared and ready and willing for another try on the next trip. And some leaders are so skilled at making the

complex seem simple that they can push their group right through the first day syndrome with hardly a bump. Still, I think we lose many potential birders because species identification is so daunting to raw beginners, and for the last year or so I have been experimenting with a very different approach on field trips for novices.

The new method grew out of an earlier experiment that failed. "Let's leave the field guides closed," I tried telling people. "We won't worry about naming the birds. We'll just see what we can notice." That format didn't work because the game was gone. A bird walk without naming is a walk without thrills.

"Let's leave the field guides closed," I tell my group nowadays. "Let's not worry about identifying the species. Let's try to identify how they feed themselves." Our text is a single page the inside cover of The Birder's Handbook by Paul R, Ehrlich, David S. Dobkin, and Darryl Wheye (EDW, hereafter) —that illustrates with icons the 18 primary foraging methods of North American birds.

The biggest advantage of this exercise is that no previous experience is necessary. It generally takes novices two or three weeks before they can thumb through their field guides fast enough to match bird to illustration before the bird flies away. Even someone who has never identified a bird

can master EDW's 18 foraging icons in an hour or two. And you know you have your group hooked when someone points to a vulture in the sky and asks, "Is that bird on high patrol?" and someone else points to a woodpecker and calls out, "Look! Bark gleaning!" The thrill of identification is still there, and anyone can share in it.

Because EDW's chart is so simple— 18 black-and-white sketches—the people in your group waste no time thumbing pages. They keep their binoculars to their eyes, watching real birds in the real world. Instead of field marks, the focus becomes biology and ecology, and two simple truths are demonstrated immediately: birds spend most waking hours foraging, and their physical features are linked to their feeding methods. Birds that live by "stalk and strike" have long necks and long legs; birds that "aerial forage" have short necks, small bodies, and proportionately large wings. A third truth becomes evident shortly: most birds are specialized feeders. Swallows never stalk and strike; herons never aerial forage.

This basic information may be taken for granted by experienced birders, but it is news to most novices—and it enables them to make sense of biological differences before they study field marks. Gulls need not be distinguished from terns only by subtle and



The Snowy Egret is a classic "stalk and strike" forager.

apparently arbitrary field marks—wing breadth, tail shape, bill size, and so on—they can be separated by an obvious behavioral difference: terns dive, gulls do not. Nuthatches might look like titmice to novice birders trying to learn by the field-marks-first method, but they'll have much less trouble if they learn that nuthatches are bark gleaners, titmice are foliage gleaners.

Using this "How is it feeding itself?" system regularly has also encouraged me to grow more alert to foraging methods in my own birding and fill in some large gaps of ignorance. Try it yourself on your next walk. How many foraging methods can you spot in an hour, or in a day? How specialized are the common species in your neighborhood? Do nuthatches ever foliage glean? Do thrashers ever hawk? Which species most often use alternate methods? Which species never change their basic method? Are there any species whose favorite method in your locality seems not to be the method listed by EDW?

And for those who need more encouragement, here's a foraging-methods quiz to test your expertise.

1. Can you name the three North American woodpeckers whose primary method is *not* bark gleaning? (Hint: One is primarily a ground gleaner; the other two hawk for insects.)

**2.** Can you name the one member of the heron family whose primary method is not stalk and strike?

**3.** How about the one dabbling duck that more often ground gleans than dabbles (at least according to EDW)?

**4.** Two birds employ foraging methods unlike any other species in North America. One is the Greater Flamingo, which filter feeds. Can you name the other bird? (Hint: It is a very well-known western bird.)

5. At least eight other birds use foraging methods not among EDW's primary 18. How many can you name? (Hint: Three are foliage browsers, two are sweepers, and three are diggers.)

6. Piracy doesn't get an icon in EDW because no North American species lives primarily by stealing food from other birds. At least 10 species employ piracy as a secondary method, however. How many of those pirates can you name?



Eighteen icons from The Birder's Handbook make it easy to identify birds by their foraging methods.

The answers to these questions can be found on page 16. I also have some questions whose answers I don't know. Is there any site in North America where a birder could witness all 18 of EDW's primary foraging methods in, say, a week of birding? Would it be possible to see all 18 in one day (a Foraging Big Day)? We'd need a site with skimmers, hummingbirds, diving ducks (or cormorants), and a mix of raptors. Anyone have a nomination?

What species in North America employs the widest variety of these methods? I can think of several birds that use five methods and one bird that uses six (ground gleaning, high dives, piracy, high patrol, low patrol, aerial foraging, and surface dips). Are there other birds that use six different methods? Are there any birds that use seven?

I'd like to hear from any readers who can answer these last few questions, and from anyone with observations or questions on the foraging behavior of birds. Please write to me c/o *Living Bird*, Cornell Lab of Ornithology, 159 Sapsucker Woods Road, Ithaca, New York 14850.



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## A Guide to Choosing



Bird-watching groups now travel to the farthest reaches of the globe to see new species. Above, a group takes a close-up look at some nesting Gray-headed Albatrosses on the grassy slopes of South Georgia Island.

## Birding Tours

by Kenn Kaufman



Planning a
bird-watching trip?
Read these valuable
tips on how to
make the most of
your travel dollar.

Picture this: You awaken in a foreign land, a place where many of the birds don't match anything you can find in your field guide, and where the bird calls are profoundly unfamiliar. No birding sites are marked on your map, and you can't speak the local language or read the road signs . . .

Is this a birder's nightmare? Not necessarily. In fact, it might be a birder's dream if you're on a guided tour with experts who know the country and its birds, and who have arranged every detail of travel for you.

The birding tour industry has gone through a spectacular expansion during the last two decades. We now have hundreds of tour offerings from which to choose, ranging in length from weekends to month-long extravaganzas, visiting sites throughout the globe. The plethora of possibilities is enough to bewilder anyone considering a first birding tour. Having watched the tour business

for a long time, I know that some clients find birding tours to be the greatest vacations imaginable. But I also know that not every tour is right for every bird watcher. This article will provide practical advice on choosing the birding tour that's right for you.

#### Tour choices: where they go, AND WHO GOES THERE

Where do birding tours go? The short answer is "every place." Or, to be more precise, every place where the birding is good and travel is reasonably safe. Regions with excellent birding, both within North America and farther afield, may be visited by dozens of tours every year.

Birding tour insiders generally recognize several kinds of tours: those run by the "Big Three"—WINGS Inc., Victor Emanuel Nature Tours (VENT), and Field Guides Inc.—those run by smaller "independents," and birding tours run by organizations that are not primarily tour companies. Any of these

may offer good value to the traveling birder.

Of the Big Three, both WINGS Inc. and VENT were founded in the mid-1970s, while Field Guides Inc. was founded by former VENT employees in the mid-1980s. All three have similar advantages: a worldwide selection of tours, led by expert birders, backed up by a professional office staff.

Smaller "independent" bird tour companies are more numerous. Such companies are often started by individual birders or naturalists who want to capitalize on their experience by running their own business. With their low overhead, independents can often (but not always) offer lower prices than the large companies for a comparable tour.

Some of the small companies excel in certain niches thanks to the quality of their leaders. KingBird Tours, for example, travels mostly to Asia, and most tours are led by Ben King, a top authority on the region's

birds. Borderland Tours features the West and the American tropics, with most trips led by colorful birder/storyteller Rick Taylor. Other small companies have their own strengths.

Tours run as a sideline by other organizations are usually less sharply focused on birds. For example, tours organized by the National Audubon Society are superb for general-interest travelers, but most of the trips (despite the Audubon name) will not satisfy an avid birder. Some tours in this category, however, do have special educational advantages.

#### THE MANY KINDS OF BIRDING TOURS

For the bird watcher who has never gone on an organized birding tour, it may be useful to describe a typical day on a tour. The days invariably begin early, since early morning is when birds are usually most active. You may have the option of taking a walk before breakfast or eating a pre-dawn breakfast before driving out to a birding area. Birding usually continues at a steady pace all morning. Lunch might be a picnic at some birdy site. In hot climates, you might return for lunch and a midday siesta at the hotel before going back out in the late afternoon. If interesting night birds are available, the group might go out on an owling expedition after dinner. The day's activities are often broken into several parts so that you can opt out of some excursions if you need to rest. But where the accommodations are far from the birding spots, you may have no choice but to stay out for the entire day.

Tour group sizes tend to be small—one or two leaders guiding 8 to 20 participants. You may find that the other people in your group are among the best things about a tour. Bird watchers in general are friendly, interesting people, and fun to travel with. Most tour participants have a fair amount of birding experience, but you'll find little snobbery on a tour (except on a few of the hard-core listing trips). A rank beginner who goes on a tour is often "adopted" by the rest of the group, who make sure that he or she gets to see everything. Still, if you're just getting started in birding, you'd be wise to master the use of your binoculars and learn some of the local birds before traveling to a bird-rich tropical region.

On a typical birding tour, the goal is to see a lot of birds and have a good time. But some tours are designed more with education in mind. In the workshops that I run through VENT, for example, we don't even compile a "trip list" of birds, because the focus is entirely on techniques of field identification.

Some outstanding educational offerings come

#### Names and Addresses of Tour Companies

**Borderland Tours**, 2550 W. Calle Padilla, Tucson, Arizona 85745. Phone: (800) 525-7753.

Cheesemans' Ecology Safaris, 20800 Kittredge Road, Saratoga, California 95070. Phone: (800) 527-5330.

Field Guides Inc., P.O. Box 160723, Austin, Texas 78716. Phone: (512) 327-4953.

Focus on Nature Tours, P.O. Box 9021, Wilmington, Delaware 19809. Phone: (302) 529-1876.

KingBird Tours, P.O. Box 196, Planetarium Station, New York, New York 10024. Phone: (212) 866-7923.

Massachusetts Audubon Society Natural History Travel, South Great Road, Lincoln, Massachusetts 01773. Phone: (800) 289-9504.

Victor Emanuel Nature Tours (VENT), P.O. Box 33008, Austin, Texas 78764. Phone: (800) 328-VENT.

**Voyagers**, P.O. Box 915, Ithaca, New York 14851. Phone: (607) 257-3091.

**WINGS Inc.**, P.O. Box 31930, Tucson, Arizona 85751. Phone: (602) 749-1967. FAX: (602) 749-3175.

Wonder Bird Tours, P.O. Box 2015, New York, New York 10159. Phone: (800) BIRD TUR. In New York and Toronto, (212) 736-BIRD. FAX: (212) 736-0965.

not from the major tour companies, but from other organizations. The Institute for Field Ornithology, based in Machias, Maine, runs workshops every summer focusing on popular bird groups, such as warblers and shorebirds. Similar workshops are organized in fall by the Cape May Bird Observatory in New Jersey. The Cornell Lab of Ornithology's Library of Natural Sounds offers a field course each summer on how to record bird vocalizations.

Many tours—including some offered by major bird-tour companies—focus on general natural history rather than birds. Field Guides Inc. was one of the first companies to organize tours to the major monarch butterfly wintering areas in the mountains of Mexico. VENT now has a separate series of natural history tours that visit regions, such as the Ozarks or the Okefenokee Swamp, where birds are not the major attraction. In addition, some tours combine birding with other pursuits. At least two companies offer "Oaxaca at Christmastime" trips—a tradition I started in the early 1980s. Participants spend mornings birding and afternoons exploring the markets, museums, and archaeological sites of this beautiful Mexican city. Each of the "Birds and Music" trips organized by WINGS is built around a major music festival in Europe, with birding scheduled between concerts. Combination trips may be the ideal compromise for couples in which only one person is a birder.

Cruise ship birding tours are in a class by themselves. Ordinarily on a cruise, the birding group is just a subset of the total passenger load, so the itinerary tends to be aimed at general interests. Common sense will tell you which kinds of shipboard birding will be worthwhile. A cruise is the only way to go if you want to see the birds of Antarctica, and it's also the only reasonable way to visit some island groups, such as the Galápagos. But for many other regions, birding by ship doesn't make sense. A birding cruise to Costa Rica, for example, is not a good choice for a serious birder, because most of the country's best bird-watching sites are well inland.

#### FACTORS TO CONSIDER IN CHOOSING A TOUR

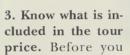
If you're looking at a specific tour, you should consider several aspects. One major factor is how much experience the company has in providing tours to your particular destination. After all, one of the greatest advantages in taking a tour is that you don't have to work out all the complicated logistics yourself. But how well can a tour company deal with those details if it's their first trip to an area?

### WHAT YOU SHOULD KNOW BEFORE SIGNING UP FOR A BIRDING TOUR

1. Who will lead the tour? Most companies are proud to announce who their leaders are, and with good reason—the leaders are expert, experienced, and popular. If a company plans and advertises a trip without determining beforehand who the leader will be, that's a bad sign.

2. Has the company done this tour be-

fore? Be wary of a trip that a company is running for the first time. Adventurous birders may choose to take such an exploratory tour anyway, but you should at least know what you are in for.



send in a nonrefundable deposit, know what your total cost will be. Are meals included in the tour price, or will you have to pay for them yourself? If the tour involves some internal flights, find out whether these are included in the listed price.

- 4. What is the pace of the tour? Most trips run by the major bird tour companies are moderately intense, with early starts and long days. But some tours are intentionally more relaxed. Conversely, other tours are marathon efforts to pursue every bird possible. Your own personal birding style will determine which kind is best for you. Any reputable company will provide an honest assessment of the pace or intensity of a particular tour.
- 5. What is the focus of the tour? Though most bird tours concentrate on birding, some have a broader focus, exploring other aspects of nature or local history and culture. Make sure you know the tour's focus before you go.



The goal on a birding tour is to see lots of birds and have fun. The tour group above visits the famed puzta of eastern Austria, home to the Great Bustard and other grassland species.

Even with a well-established company, the first tour in a new area may be something to avoid. Logistical problems or lengthy delays may come up unexpectedly. And besides, on the very first trip to a new region, your fellow clients could turn out to be bored-and-boring listers who have been everywhere and are just looking to add a few more check marks to their life lists. If you wait for subsequent trips, the tour company should have the wrinkles ironed out of the itinerary, and the other tour participants should be genuinely interested in watching birds.

When comparing the prices of tours offered by different companies, be sure you know what is included in the advertised price. Some tours, for example, include meals in the cost of the trip, while others expect you to buy your food, which is fine—as long as you know in advance and take it into account as you make your price comparisons. Also find out whether airfare is included in the tour package price.

Differences in price among similar tours may also reflect the type of lodgings the company arranges. Some companies go for the

the birding sites include not only beautiful natural areas but also roadsides and garbage dumps. It can be a costly mistake to pay for a trip for two that will only be enjoyed by one. (As the wife of one birder said, "I don't know how he's going to afford the tour and alimony, too.") If you're inviting a nonbirder along on a birding tour, look for short trips at first, or consider taking a "compromise" tour that combines birding with other pursuits.

#### Doing your own research ON TOUR POSSIBILITIES

Finding out the dates and destinations of current tours is usually easy. If you're looking for a tour, you can be sure that the tour operators are looking for you. Most tour companies publish annual catalogs or more frequent newsletters describing their tour offerings in detail. You can obtain these by contacting the companies by telephone or mail. I've listed the addresses of some major tour companies in a sidebar to this article, but you can find many more companies advertised in most popular bird magazines. Write for tour catalogs from several companies to widen your choices

and get a thorough idea of what is available. Of of what is available. Ot course, a written descrip-₹ tion can never provide a E complete picture of what a tour will be like. Some further research on your part will definitely pay off.

Most tour companies except for the smallest independents—maintain offices with regular business hours. If you're uncertain about any aspect of a tour, don't hesitate to call the staff. If you have asthma, for example, you may want to know the maximum elevation a tour will reach. If that information is not in the printed tour material, the company

office should be able to find it out for you.

The success of a birding tour depends largely on the skills of its leaders. And not just birding skills. The ability to handle logistics is vital, and "people skills" may be even more so. It's no fun to travel with a leader who has a rotten personality, no matter how well the person may know the birds. People who work for major tour companies are likely to be excellent leaders; they wouldn't last long otherwise. On the other hand, an independent leader who has started



If you're planning to take along a nonbirding spouse or friend, consider booking a tour that combines bird watching with sightseeing. Above, a group visits the picturesque and bird-rich Mayan ruins at Tikal, Guatemala. Far left, birders take a boat ride to a Magnificent Frigatebird roost at Boca de Soledad, Mexico.



least expensive, most basic hotels they can find to keep the price of their tours low, while others aim for more upscale accommodations. The ratio of participants to leaders can also affect the price; it may be worth paying a little more to be able to bird in a smaller group.

A birding tour can be a great vacation for couples—but only if both people are keen birders. A nonbirding spouse who comes along on a tour may find that the days are long, the hotels are far from beaches or nightlife, and



his or her own company could be wonderful or terrible. This is no reason to avoid the smaller companies, but you may want to do some extra research before signing up for a tour with one of them. One of the best ways to find out about particular companies or tour leaders is to talk to someone who has traveled with them.

Of course, no leader can deliver a perfect tour if the original itinerary is flawed. A savvy traveling birder will research a region and its birds to judge whether the planned itinerary is a good one. If you're a keen birder bent on visiting Kenya, for example, you may find out that many of the country's bird species are found only in the forests of western Kenya. Armed with that knowledge, you might pass up a tour that goes only to the game parks in central Kenya and look for a trip with a more bird-oriented route.

But there's another reason for researching a tour destination, and it is perhaps the most important reason of all: for the fun of it. After all, your enjoyment of a birding tour doesn't have to be limited to the time that you're actually on the trip. You can savor the possibilities of a birding tour for months beforehand. And if you've chosen wisely, warm memories of your trip can last a lifetime.

Kenn Kaufman is a renowned birder, tour leader, and author of A Field Guide to Advanced Birding.

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#### Answers to the quiz on page 9

1. Northern Flicker, Lewis' Woodpecker, Redheaded Woodpecker. 2. Cattle Egret. 3. Greenwinged Teal. 4. American Dipper. 5. Foliage browsers: Ruffed Grouse, Spruce Grouse, Willow Ptarmigan. Sweepers: Roseate Spoonbill, American Avocet. Diggers: Crissal Thrasher, Le Conte's Thrasher, California Thrasher. 6. Magnificent Frigatebird, Parasitic Jaeger, Pomarine Jaeger, Long-tailed Jaeger, Heermann's Gull, Laughing Gull, Common Black-headed Gull, Glaucous Gull, Mew Gull, Bald Eagle. (Great Skua and South Polar Skua also pirate, though they are not described in EDW since they do not nest in North America.)

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After reading it, I realized that what he had done was to create a compendium, or in truth, an encyclopedia, of thousands of bits of hard information about birds. There seemed to be almost no fact pertaining to birds—their lives, habits, behavior, dimensions, morphology, anatomy, etc., that was omitted.

From the introduction by Arnold Small

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### Birding by Mail

by Rick Bonney

he first merit badge I earned as a Boy Scout, which will probably come as no surprise, was ornithology. (Except I think it was called bird study.) Now, three guesses—what was the second? It wasn't nature, or camping, or cooking, or even swimming or lifesaving—although I did earn all of those badges during my short scouting career. Nope, you're not even close. The second merit badge I earned, and the one that actually gave me the most pleasure, was stamp collecting.

I never lost my interest in birds, not even in high school, where my bird-watching escapades earned me the nickname "Ranger Rick" (which was not meant to be complimentary). The stamps, however, were banished to shoe boxes when my teenage sweetheart informed me that they were definitely not cool.

But just last year, after my wife's father passed away, I discovered his stamp collection in a closet. When I started sorting through it my childhood interest was rekindled. Soon thousands of bits of colored paper were again spread across my desk, and I'd become a collector once more. But not a general collector, as I had been in my youth. Nowadays, so many stamps have been issued that specialization has become imperative. My solution? I'm an ornithophilatelist.

I'm not alone; collectors of bird stamps are everywhere. According to surveys conducted by the American Topical Societya group of people who collect stamps according to the topic pictured, for example, ships, trains, lighthouses—birds are consistently among the most popular subjects collected.

It's no wonder. Virtually every country is-

sues stamps picturing birds, sometimes dozens in a year. To date, more than 10,000 different bird stamps have been printed, worldwide, depicting over 2,200 bird species. In fact, so many bird stamps are now available that many collectors further restrict their efforts to just a few species.

My own collection runs to stamps showing doves and woodpeckers. Why? Doves because of the Lab of Ornithology's Project PigeonWatch; I've found that collecting dove stamps has given me a global perspective on this fascinating family of birds. And I collect woodpeckers on stamps because I think they look nice.

Getting started in bird-stamp collecting is is to buy a packet of stamps from a topilisted in Topical Times, the

Here's another activity to add to your list of bird-related hobbies



Topical Association (P.O. Box 630, Johnstown, Pennsylvania 15907). One company, for example, regularly offers a packet of 500 different bird stamps for \$16.00 postpaid.

The stamps in such a packet will obviously be of the more common variety, for example, the 1956 Wild Turkey from the United States (1), the 1964 pair of Silver Gulls

> from New Zealand (2), the 1965 Scarlet Macaw from Panama (3), the 1968 pairs of White Storks and Redfooted Falcons from Hungary (4), the 1990 pair of Rock Doves from South Africa (5), or the 1964 Black-tailed Godwit from Poland (6). Many packet stamps are "can-

> > celed to order," or

808A

CTO, as illustrated by the Hungarian issues; such stamps were never intended for use on mail, and are intended solely for collectors. ("Pure" philatelists frown on collecting such stamps—1'm not above it myself.)

Once you've sorted out a packet, you can satisfy further collecting desires at relatively low cost by getting on a "sales circuit," which consists of books of stamps circulated through members of an organization, for example, the American Philatelic Association, P.O. Box 8000, State College, Pennsylvania 16803. I've seen lots of great stamps in such circuits, for instance, the 1967 Doubletoothed Barbet from Rwanda (7), the 1961 Guianan Cock-of-the-rock from Venezuela (8), the 1960 Magel-

lanic Woodpecker from Argentina (9), the 1968 Ostrich (and Golden Pheasant) from the Soviet Union (10), and the 1958 Eurasian Woodcock from Yugoslavia (11).

> When you're really bitten by the collecting bug, though, you'll need to start puchasing stamps from a dealer. Most communities have lost the neat little stamp stores I remember from my youth, but mail-order dealers are thriving. (Check out Global Stamp News, P.O. Box 97, Sidney, Ohio 45365.) From a dealer you can purchase such beauties as the 1935 Red-footed Booby from the Cayman 1slands (12), the 1946 Canada Goose, the first bird stamp ever issued in Canada (13), the 1959 skuas and the 1963 Adélie Penguins from the French Southern and Antarctic Territories (14), and the 1909 Dwarf Cassowary from North Borneo (15).

> > Some collectors prefer to collect stamps "on cover," that is, still attached to the envelope on which they were mailed. A subset of this is the first day cover such as the one on page 17 and the two at left—a cover canceled on the first day the stamp was offered for sale.

> > > The stamps on these pages are from the Lab of Ornithology's collection-which was given to Lab in 1968 by Mrs. Donald Wood-and also from

my personal collection. I hope you enjoy them as much as I do.























ПОЧТАСССР









## Cutting Through the Fog

Text and photographs by Steve Faccio

#### Is the Bicknell's Thrush headed for extinction? The answer is as foggy as its mountaintop home.

orth American birders may soon have a new species to add to their life lists, and a new challenge—identifying it. This "new" bird is nearly impossible to distinguish from its closest relative unless you hear it sing on its mountaintop

breeding grounds in the northeastern United States and Canada's Maritime Provinces. And until recently, its status (distribution and population size) was as foggy as its lofty mountain haunts. If declared an official species by the Check-list Committee of the American Ornithologists' Union (AOU), it will be the Northeast's only endemic songbirdthe only bird that nests

nowhere else. This neotropical migrant, which winters on a few Caribbean islands, may also rank as a potentially endangered species.

Since Eugene Bicknell discovered the bird in New York's Catskill Mountains in 1881, ornithologists have classified Bicknell's Thrush as a subspecies of the more widely distributed Gray-cheeked Thrush. Ornithologist George Wallace first reported distinct differences between the two races in his classic 1939 study. Bicknell's Thrushes were considerably smaller than gray-cheeks and had shorter wings. They were also, on average, a richer brown color

than the olive-gray gray-cheeks, although both subspecies appear in both color forms, making visual identification in the field difficult. Wallace also reported that the two forms sang slightly different songs on their breeding grounds, which are separated by an area the size of

> Maine. These differences. although compelling to many ornithologists, were not at the time enough to warrant species status for Bicknell's Thrush.

Recent research by Canadian zoogeographer and taxonomist Henri Ouellet, however, indicates that the two races may indeed be distinct species. Although the differences between the birds' songs are subtle to human ears, when

Ouellet played recordings of gray-cheek songs during the breeding season, Bicknell's Thrushes completely ignored them—indicating that the birds probably don't mix during mating season. These findings were supported by the work of Gilles Seutin, then a University of Montreal graduate student. Seutin used sophisticated analyses of mitochondrial DNA to reveal significant genetic differences between the subspecies. His study suggested that the two birds diverged from an ancestral population and have since evolved independently.

In June of 1993 I saw my first Bicknell's



Is the Bicknell's Thrush, far left, a separate species? It is smaller and browner than the Gray-cheeked Thrush, with a distinctly different song. Above, Chris Rimmer, VINS director of research, rigs mist nets on Vermont's Haystack Mountain. It's part of the effort to determine the Bicknell's breeding population essential baseline data for a bird that may be endangered.



Thrush. It was lying helpless but unhurt in a mist net near the summit of Mount Mansfield, Vermont, the site of Wallace's 1939 study. I was there as part of a research project developed by the Vermont Institute of Natural Science (VINS) and the Manomet Observatory (MO) to investigate the population status and distribution of the Bicknell's Thrush. Two ornithologists, Chris Rimmer and Jon Atwood, hatched the idea for the study in 1991 after they heard Ouellet and Seutin present their findings at the 109th annual meeting of the AOU. Rimmer and Atwood immediately realized that we know very little about this neotropical migrant—so little that if the entire population dwindled to dangerously low levels, it would probably go unnoticed. No baseline data on the thrush existed, and birders rarely visit its mountaintop habitat.

Rimmer, the director of research at VINS, and Atwood, a senior staff scientist at MO, wondered if populations of Bicknell's Thrush were already declining. They knew that

essential habitat—both the spruce-fir forests where the birds nest and their restricted wintering habitat in the Caribbean—face a number of threats.

Historically, Bicknell's Thrush ranged from Nova Scotia, New Brunswick, and the Gaspé Peninsula in Canada, south through the mountains of northern New England and New York during the breeding season. Recently, the birds have disappeared from some nesting areas in the Canadian Maritimes, and in Massachusetts the subspecies has not nested on Mount Greylock, its only known breeding location in that state, since 1972.

Bicknell's Thrush nests almost exclusively in highelevation forests, mostly above 3,000 feet, in the northeastern United States. These mountaintop forests, mostly red spruce and balsam fir, are like islands in a sea of unsuitable habitat. Since the mid-1960s red spruce stands in New Hampshire, Vermont, and New York have suffered severe diebacks that scientists attribute to acid pre-

cipitation. Additional habitat loss to ski area development and transmission tower construction could further reduce this already restricted breeding range. Furthermore, northern coniferous ecosystems across North America could be drastically altered by global warming. Research indicates that a mean annual temperature increase of 2

4:30 A.M. I was hiking on the Long Trail in Vermont's Green Mountain National Forest by 5:30. Twenty minutes later I reached the stream crossing I had marked on the topographic map, checked my compass, and headed off the trail and uphill. By 6:30 the sugar maples and white ash trees yielded to red spruce and balsam fir, and

Their song is more under the breath than that of any other thrush, as if the bird was blowing in a delicate, slender, golden tube . . like a musical whisper of great sweetness and power

the Black-throated Blue Warblers and Scarlet Tanagers gave way to Blackpoll Warblers and Dark-eyed Juncos. I was at the 3,000-

foot summit of an unnamed peak. I sat down next to a pile of moose scat to catch my breath and unpack the contents of my day pack: binoculars, clipboard

degrees Centigrade would cause red spruces to be replaced by deciduous hardwood trees.

The winter home for Bicknell's Thrush appears to be limited to a few Caribbean islands, primarily Hispaniola (Haiti and the Dominican Republic) and Puerto Rico. Ecological studies on these islands indicate that Bicknell's Thrush probably inhabits only primary tropical forests, and these forests have been heavily clear-cut, burned, and otherwise converted to alternative uses that support burgeoning human populations. It seems certain that widespread deforestation throughout the Caribbean has adversely affected Bicknell's Thrush. How much is un-

In 1992 VINS and MO began to assess the conservation status of Bicknell's Thrush, to determine whether it deserves formal protection under federal or state endangered species laws. Rimmer and Atwood hoped to answer three basic questions: 1) Where are Bicknell's Thrushes currently found, and how does their present breeding distribution compare with historic information? 2) How large is the population and is it increasing or decreasing? 3) What are the most efficient methods for censusing the birds?

The researchers knew they would need a lot of help to answer the first question. The peaks where Bicknell's Thrush breeds are widely scattered throughout the fivestate region, and they're usually accessible only on foot, often without even the "luxury" of trails.

They recruited an impressive group of 141 volunteer observers to help census peaks in New York, Vermont, New Hampshire, Massachusetts, and Maine. Grants from the National Fish and Wildlife Foundation and the U.S. Fish and Wildlife Service (USFWS), matched by funding from several private foundations, supported two field assistants who surveyed 71 peaks in Maine and two more who surveyed peaks in Vermont, New Hampshire, and New York. A number of VINS staff members, including Chris Rimmer and me, took time off from other projects to scale a few Bicknell's peaks.

To survey my three assigned peaks I set the alarm for

with survey instructions and data sheets, and portable tape player loaded with a recording of Bicknell's Thrush songs and calls from the Cornell Lab of Ornithology's Library of Natural Sounds (LNS).

Before playing the tape, I waited a few minutes, listening. Winter Wren, Yellow-rumped Warbler, White-throated Sparrow, and a buzzing horde of mosquitoes announced their presence; Bicknell's Thrush did not. I pushed a button on my tape deck to broadcast a spiraling, reedy song through the conifers. Moments later a bird responded.

First I heard a distinct, nasal call note, wheere, then a male Bicknell's Thrush in full song. His voice had the musical quality of all Catharus thrushes, something like a Veery but thinner and more subtle. The brief song tumbled down the scale, then rose sharply at the end. The bird sang for less than a minute, then silently vanished, leaving me without so much as a glimpse. It was a typical Bicknell's encounter—brief, mysterious, enticing. Perhaps at the next survey site I'd get a look at this secretive thrush.

The LNS recordings are essential for accurately and efficiently determining the presence or absence of Bicknell's on small, isolated mountain peaks with limited habitat and few thrushes. The birds are most responsive to the taped songs and calls during June and early July, the period of highest vocal activity and territoriality. So with the tapes an observer can quickly complete a survey and move to another site to repeat the process.

My next stop was Mount Mansfield. As I drove west out of Stowe, Vermont, on a calm June morning the summit was lit by a rising sun, though no other place in the state was in sunshine. A ring of fog circled the lower half of the mountain like a lacy veil, above which a broad ridge line formed the profile of a reclining face. To the left, still in shadow, was the "Forehead," to the right, bathed in warm light, the "Chin," which at 4,393 feet is Vermont's highest point. I turned onto the Mansfield toll road.

This was my first visit to Mount Mansfield and I was anxious to reach the summit. When I finally arrived at a parking area just below the "Nose," the mountain had raised its veil and the summit was shrouded in a dense

fog. Finding my colleague Chris Rimmer, who had arrived the day before, would be difficult.

Chris and Jon Atwood set up a study plot on Mansfield in 1992 to investigate the population density and breeding ecology of Bicknell's Thrush. At an elevation of 3,800 to 3,900 feet, the plot encompasses about 22 acres of *krumholtz*, the stunted, wind-shaped trees that grow just below treeline. Several trails wind their way through the dense vegetation, which is dominated by balsam fir, red spruce, and dwarf birch. On one of these trails I finally found Chris removing a White-throated Sparrow from a mist net. "Where are the donuts, Doc?" he greeted me, then added, "It's going to be tough to see color-bands in this fog."

Chris knows the study site intimately, having spent many hours conducting point-counts, doing line transects, and spot-mapping Bicknell's Thrush territories to estimate their population density. As we took down a mist net to move it to a different location, Chris explained that, based on his 1992 field work, he estimated between 40 and 55 pairs occupied each 100 acres of suitable habitat on Mansfield. Now he was trying to color-band as many birds as possible, to get a better understanding of their demographics and breeding ecology. But catching

the secretive thrushes has been more difficult than he expected. During the seven hours that I spent with Chris, we caught just one Bicknell's Thrush.

The dense vegetation and steep terrain at the study site limit where mist nets can be set up. Hiking trails, the toll road, or bare rock are the only suitable locations. And since the trees are only 6 to 8 feet tall, birds can see and avoid the nets much more easily than they do in the shady understory of low-elevation forests. To keep the birds guessing, Chris moves the nets frequently, and to increase the chances of catching birds, he often takes a more active approach, placing a carved, wooden thrush decoy near the net and broadcasting a tape recording of Bicknell's songs and calls to attract territorial birds. In one of these "active" nets we caught our Bicknell's-the first I'd ever seen.

The bird was a rich chocolate color, browner than the Swainson's Thrush we had caught earlier, and

lacked the buffy eye ring of that species. We fitted it with an aluminum USFWS band and a unique combination of three plastic, colored leg bands that would permanently identify it. Chris measured its wing length, checked its breeding condition, stage of molt, and amount of body fat, and placed it in a nylon stocking to be weighed as I recorded the information on a data sheet.

After 10 minutes we released the bird, and it disap-

peared into the maze of branches. Chris and I moved the mist net to a new location and began work on another phase of the breeding ecology study—finding nests. Periodic nest monitoring helps to determine how the birds use their habitat and how successfully they are reproducing.

Describing his field work on the Bicknell's Thrush almost 60 years ago, George Wallace wrote, "Only a freak ornithologist would think of leaving the trails for more than a few feet. The discouragingly dense tangles in which Bicknell's Thrushes dwell have kept their habits long wrapped in mystery." I now have a firsthand appreciation of this declaration. You don't truly experience the *krumholtz* until you venture off the trails. I used a combination of techniques, including blindly forcing my way through densely interwoven stands of spruce, belly-crawling underneath the trees, and stumbling over logs, rocks, and unseen tree limbs. More than an hour later I emerged, scraped and sweaty, without having found a single nest.

Although mist netting and nest searching are labor intensive and time consuming, Rimmer and Atwood have made progress in understanding this secretive bird's population and conservation status. After two years of field work, survey results show that Bicknell's Thrushes are



A rare encounter between bird and biologist. Chris Rimmer, above, and a crew of more than 140 volunteers scaled dozens of northeast peaks in search of the Bicknell's Thrush, which breeds in impenetrable mountaintop tangles.

surprisingly widespread. They were present on 230 of the 332 peaks surveyed in New York and New England in 1992 and 1993. Population estimates ranged from one or two pairs on about 80 peaks to more than 200 pairs on Vermont's Mount Mansfield.

Although the bird's distribution doesn't seem to have changed significantly compared to historic reports, important questions remain about population size and stability. Since declines are most likely to show up as range contractions in peripheral populations, the disappearance of Bicknell's Thrush from Mount Greylock in Massachusetts and several areas of the Canadian Maritimes underscores the need for continued monitoring.

A total of 58 Bicknell's Thrushes have been colorbanded at the Mount Mansfield site. These birds will be the foundation for future studies, primarily to assess the population stability of this restricted habitat specialist. Seventeen of the 31 adult birds banded in 1992 and 1993 were recaptured or resighted in a subsequent year, suggesting that they have strong site fidelity and good survivorship. We plan to compare these and future results from Mount Mansfield with data collected from small,

Rimmer and his crew use wooden decoys and Bicknell's Thrush recordings from the Lab's Library of Natural Sounds to attract the secretive thrushes to their nets. Banding studies are shedding light on bird numbers and breeding success.

isolated Vermont peaks that support fewer than 10 pairs of Bicknell's Thrushes; to this end, 25 Bicknell's Thrushes were color-banded on eight other Vermont mountains in 1994. In addition, there are plans to establish a small number of long-term study sites similar to the Mount Mansfield site on other large peaks in the Northeast.

When pieced together, this information will allow us to extrapolate across the bird's range to determine its current population size and conservation status and provide a baseline for monitoring future changes. In addition, since Bicknell's Thrushes are restricted to highelevation habitats, they may be valuable indicators of environmental change. Alpine habitats face several environmental threats including atmospheric pollution, forest fragmentation, and global warming. VINS and MO are in the process of establishing 40 to 50 long-term census sites for species that breed at high elevations, including Bicknell's Thrush. These sites will be distributed throughout the Northeast's five major mountain ranges: the Catskills, Adirondacks, Green Mountains, White Mountains, and Maine Mountains. Annual censuses of the sites will provide much-needed data to assess population trends and conservation needs for this entire bird community. In addition, surveys are planned in the Caribbean, to collect critical information about Bicknell's Thrush distribution and habitat use on its wintering grounds.

Whether or not the AOU Check-list Committee will award species status to the Bicknell's Thrush remains to be seen. So do the implications of such a distinction. Will it really matter if a new species of thrush is included in the next edition of the National Geographic field guide? To birders it certainly will, but conservation needs bear little relation to an organism's taxonomic standing.

Unfortunately, past efforts to protect rare subspecies have met with some resistance. The Dusky Seaside Sparrow is a case in point. During the 1970s widespread habitat loss brought the Dusky, a subspecies of the Seaside Sparrow, to the brink of extinction. Financial constraints which forced the USFWS to give low priority to populations that were not full species pushed it over the edge. This outcome is perhaps understandable—there's only so much money, and we have to set priorities—but it's still unfortunate for the Dusky Seaside Sparrow, which is now extinct.

But perhaps we've learned our lesson. Recently a subspecies of the California Gnatcatcher was assigned "threatened" status by the USFWS (see Jonathan Atwood's article in the Spring 1993 Living Bird). Along with this listing, Interior Secretary Bruce Babbitt unveiled an innovative strategy designed to protect the gnatcatcher's dwindling habitat. This ecosystem approach to conservation is expected to be a national model

for the Clinton administration's philosophy regarding the Endangered Species Act.

As I sat on a Mount Mansfield boulder that evening and listened to a singing Bicknell's Thrush, I was reminded of John Burrough's eloquent description of the song in his book, Riverby. "Their song is more under the breath than that of any other thrush," Burroughs wrote, "as if the bird was blowing in a delicate, slender, golden tube . . . like a musical whisper of great sweetness and power." I wondered whether Bicknell's Thrush would warrant formal protection under the Endangered Species Act, or formal designation as a full species, or both. Whether or not it receives either of these distinctions, the bird will still occupy the precarious perch on which its restricted distribution and specialized ecology have placed it.

Steve Faccio is a research biologist and educator at the Vermont Institute of Natural Science in Woodstock, Vermont.

#### CALLS IN THE NIGHT

Ithough many people don't know it, most North American songbirds migrate at night. Not only that, but the birds vocalize while they're flying. My overwhelming fascination with these nocturnal flight calls unwittingly led me to discover the night call of the Bicknell's Thrush.

In the spring of I989 I was on the east coast of Florida, near Cape Canaveral, listening to the night flights overhead and trying to identify the birds giving each different call. Recognizing birds such as Canada Geese when they pass over at night is easy. But unlike geese, which make the same *honk* night and day, songbirds make nighttime calls that are often very different from their daytime calls. Because the birds are flying under cover of darkness, learning the identity of the caller can be quite difficult.

One of my strategies for matching nocturnal flight calls with the birds that make them is to record and compare calls from different geographic regions. The Bobolink, for example, is a common migrant in Florida but rare in south-coastal Texas, and the Dickcissel is a common migrant in south-coastal Texas but rare in Florida.

My recordings of nocturnal flight calls reflect this migration geography. I've recorded thousands of the Bobolink *pink* notes in Florida, but none in Texas. In Texas, the low, burry-sounding *bzrrt* of the Dickcissel is one of the commonest nocturnal flight calls, but I've never recorded it in Florida.

My encounter with Bicknell's Thrush came as I was listening to tapes from the last night of my 1989 Florida recording trip. Amid the thousands of songbird calls on those tapes, two isolated calls stood out. They sounded like the calls of the Gray-cheeked Thrush, but they had a different quality. I knew that thrush calls were variable, though, and my curiosity was soon distracted by other intriguing questions.

Two years later, in the spring of 1991, I returned to Florida. During a spectacular mid-May nocturnal flight along the coast, I recorded about 20 more of the unique-sounding calls.

What were they? Because of the location, the season, and their similarity to Gray-cheeked Thrush calls, I thought they might belong to Bicknell's Thrush. Ornithologists have collected three specimens of Bicknell's Thrush in eastern Florida during spring migration, so it seemed likely that the bird migrates through the state, especially considering that it

winters on some mountainous islands in the Caribbean.

To verify my tentative identification, I returned to the Cornell Laboratory of Ornithology and asked for some recordings of the species from the Library of Natural Sounds. I wanted to compare my mystery night calls to

the daytime calls of Gray-cheeked and Bicknell's Thrushes. The recordings I used had been made by Lab co-founders Arthur A. Allen and Peter Paul Kellogg back in the early 1950s, on the birds' breeding grounds.

I used the computer software program "Canary" (developed by the Lab's Bioacoustics Research Program) to make spectrographs of the daytime calls and my night calls. When I compared them, I found that my nocturnal calls had characteristics similar to the diurnal calls of the Bicknell's Thrush. They were about a kilohertz higher than those of the Gray-cheeked Thrush; the spectrographs were also less arched and sloped downward more uniformly.

In the spring of I993 I returned to Florida and recorded about a dozen more nocturnal flight calls that matched the ones I had identified as Bicknell's Thrush. Recent estimates put the Bicknell's population at more than 5,000 individuals, so the number of birds I detected in Florida seems surprisingly small.

Why did I record so few birds? Do most of the birds migrate through Florida later in May? Or do most birds bypass Florida and migrate over the Atlantic, making landfall in the Carolinas?

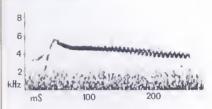
The technique of identifying birds by their nocturnal flight calls is still under development. Perhaps in the near future we can use it to answer these questions, and even to monitor the populations of species such as the Bicknell's Thrush.

—Bill Evans

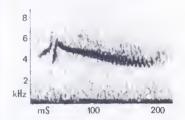
Bill Evans is a research associate at the Cornell Laboratory of Ornithology.

Further Reading

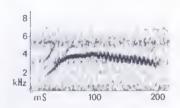
Evans, William R. Nocturnal flight call of Bicknell's Thrush. *The Wilson Bulletin*, vol. 106, pp. 55-61; 1994.



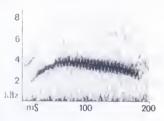
Bicknell's Thrush nocturnal call



Bicknell's Thrush daytime call



Gray-cheeked Thrush nocturnal call



Gray-cheeked Thrush daytime call

Bill Evans's mystery night call, top, looked more like the daytime call of the Bicknell's Thrush than either of the Gray-cheeked Thrush calls.



## SLOWSKI WILDLIFE PRODUCTION

## BIRD FEEDING BASICS

by Sheila Buff

From seed types to squirrel defenses,
everything you'll need to know to attract
birds to your yard

hen we moved into our house in the Hudson Valley, friends gave us a wooden bird feeder as a housewarming gift. Eager to begin the rituals of country living, I promptly filled the feeder with a bag of mixed seeds from the supermarket and hung it with stout string from a tree branch near the house. Within an hour, the backyard birds had discovered the feeder and were flocking to it with gratifying eagerness. Within two hours, a squirrel, obviously experienced in these matters, bit through the string and sent the feeder crashing to the ground. As I stood contemplating the wreckage, an adorable little Black-capped Chickadee darted down to the splintered feeder, snatched a sunflower seed, and flew directly into a closed window. Clearly, there was more to this bird feeding business than I'd thought.

Flocks of colorful feeder visitors such as the American Goldfinches at left are everyone's backyard dream-come-true. Read on for tips on making your own bird-feeding station irresistible to birds—and safe from marauding squirrels.

Not too much more, as it turns out. After feeding birds for seven years and writing two books on the subject, I've learned that to be successful you must do three basic things: offer appropriate foods, select sturdy feeders, and try to keep the squirrels away.

#### WHAT TO FEED THE BIRDS

The birds that are most likely to come to your feeder are the ones that eat seeds, so seeds are what you should offer. But what kind? Scientific studies such as the Cornell Lab of

Ornithology's Seed Preference Test and empirical evidence alike show that most birds have two clear favorites: black-oil sunflower seeds and white proso millet.

Large birds, small birds, and birds in between love black-oil sunflower seeds. They have a high meat-toshell ratio; they're nutritious and high in fat, which birds need; they have thin shells that are easy to crack; their small size makes them easy to manipulate in the bill; and they're inexpensive. Blackoil sunflower seeds are particularly attractive to chickadees, cardinals, nuthatches, siskins, redpolls, titmice, finches, crossbills, small woodpeckers, and grosbeaks. Indeed, a wandering flock of about 30 Evening Gros-

beaks once emptied the sunflower seeds from my gallon-sized feeder in the course of a single winter afternoon.

White proso millet is what most people envision when they think of birdseed. This small, round seed is the major ingredient in most commercial seed mixes for pet parakeets and canaries. The volunteer-based Seed Preference Test provided evidence that millet is a good seed for attracting small, ground-feeding birds such as doves, juncos, and sparrows and larger ground-feeders such as Bobwhites and Mallards. Most of the birds that like sunflower seeds will also eat white proso millet, although with less enthusiasm.

Corn is another bird favorite and perhaps the least expensive of all bird feeds. Larger birds such as jays, ducks, geese, quail, and turkeys eat whole or coarsely cracked grains; finely cracked corn (also called chick corn) attracts smaller, ground-feeding birds such as cardinals, towhees, juncos, doves, and assorted sparrows. Be sure your feeder is weatherproof when you offer corn. In a leaky feeder, finely cracked corn absorbs water and turns into a sticky, moldy blob.

Thistle seeds (also called niger) magically attract some of the most colorful backyard birds, including American Goldfinches and Indigo Buntings. Even better, squirrels and larger birds usually aren't very interested in these tiny black seeds. But thistle is expensive—nearly twice the price of black-oil sunflower seed. To avoid waste, offer it only in a special thistle tube feeder with tiny feeding ports.

The commercial seed mixes you can buy in feed stores, garden centers, and similar outlets usually combine sunflower seeds and white proso millet with other seeds such as wheat, red millet, oats, peanut hearts, corn, canary seed, rice, and red milo (also known as grain sorghum). Some mixtures even contain bits of fruits and berries. The manufacturers formulate these mixtures for a particular season or to attract a particular type of bird—finches, for example.

Many commercial mixtures are no bargain. The filler seeds, which have little appeal to backyard birds, may make up half or more of the mixture, and mixtures often cost a bit more than the equivalent amount of plain black-oil sunflower seed. Red milo, which is very inexpensive, is often a main ingredient in mixes, especially the cheaper ones commonly sold in grocery stores (you can detect it by its reddish color). According to Seed Preference Test data, milo is popular with some bird species, especially in the Southwest, but often birds will pick through the mixture to find the sunflower seeds and white proso millet and flick the filler onto the ground. Ground-feeding birds do eat some of the discarded seeds, but the rest will rot or attract unwanted rodents.

Why pay for wasted food? If you want to offer an attractive and low-cost seed mixture, mix it up yourself. I like to pour one 25-pound sack of black-oil sunflower seed, one 10-pound sack of white proso millet, and one 10-pound sack of coarsely cracked corn into a 33-gallon plastic trash barrel. I use a broomstick to mix the seeds together. The mixture fills the barrel about two-thirds full. Be sure to replace the lid tightly. I once forgot to do this and the next time I opened the barrel I found a mouse sitting on the pile, calmly munching seeds.

Insect-eating birds such as woodpeckers, titmice, chickadees, and nuthatches all take seeds from the feeder, but you can also attract them with suet. Suet is beef fat, generally but not always from around the kidneys. You can usually buy it for under a dollar a pound at your



Sturdy plastic tube feeders like this one are durable and easy to clean. The black-oil sunflower seed inside is a good all-purpose food—most feeder birds like it, and the price is right.

supermarket meat counter (sometimes free to good customers), or buy ready-to-use cakes at a feed center.

Hang the raw suet from a tree in a mesh bag or a suet basket made of vinyl-coated wire. Perhaps because we humans don't like the idea of eating raw fat, many people make their own cakes of suet mixed with cornmeal, peanut butter, and a variety of seeds, nuts, and fruits. These cakes don't really attract the birds any better than plain suet does, but they do attract squirrels and raccoons.

Suet is usually thought of as a cold-weather food, but you can offer it throughout the year. It goes rancid quickly in the summer heat, though, so put out small amounts. Some people even take down their suet feeders at night and store them in the refrigerator.

#### Types of Feeders

Most garden centers and nature stores offer a wide range of bird feeders. Look closer, however, and you'll see that many feeders are poorly designed or made of materials that won't hold up well.

First, design. The ideal feeder is sturdy and can withstand cold, wet winter weather. It has a fairly large capacity—at least two quarts—so that you don't have to refill it constantly. It's easy to assemble, put up, fill, and maintain (if it's a hanging feeder, be sure the hanging ring

is securely attached). The feeder absolutely must keep the seed dry. It should be squirrel-resistant (more on that later). Most importantly, it should be safe. Too many bird feeders, including some very popular models, have poorly designed feeding ports that let birds stick their heads in, or even enter the feeder, especially when the seed level is low. The birds may be injured or killed trying to get out.

Next, materials. My rule is simple: Avoid wood, unless you find the feeder particularly at-

tractive from an aesthetic standpoint. Feeders made from wood are easy targets for squirrel attacks. In addition, the rough surface can be a breeding ground for microorganisms that cause disease. If you keep your wooden feeder clean and don't get too emotionally attached to it, you should be able to enjoy it for at least a few months. Feeders made of metal or tough polycarbonate plastic are sturdy, far less vulnerable to attack, and much easier to keep

Feeder design and materials come together

#### BIRD FEEDERS I HAVE KNOWN

eeding birds can be as simple as tossing stale bread out your back door or as involved as providing a range of different feeders for every type of food and bird. For good, all-purpose backyard feeding, I recommend the feeders below.

One dome feeder stands out for its solid construction, attractive appearance, and effective squirrel resistance: the hanging Droll

Yankees Big Top (\$51.00). The Big Top holds nearly a gallon of seed, is made of heavy plastic, and accommodates both clinging and perching birds. The domeshaped baffle keeps off the squirrels and protects the seeds from the elements. An additional baffle protects the vulnerable point where the hanging chain attaches to the feeder. You should easily get five years or more of excellent service from this feeder. A smaller version of the Big Top, the Droll Yankees Seed Saver (a bargain at \$19.50), has the same features but holds less than a quart.

One of the best tube feeders is the Aspects Twin Tube (\$29.95). Two sturdy tube feeders from Droll Yankees are also very good: the imaginatively named A-6 and B-7

> models. The A-6 (\$26.00) holds only a quart; the larger B-7 (\$48.00) holds twice as much. Other excellent tube feeders are the **Hyde Super Silo** (\$43.95) and the Audubon Triple Tube (expensive at \$65.00, but worth it for the extra-large capacity). All have good design, solid construction, and metal fittings. Any of these durable feeders would be a good choice.

> I have had excellent luck with the hanging version of the counterweighted Absolute Squirrel-Proof Feeder, made by

Heritage Farms—the squirrels haven't even chewed the wooden perch bar yet. This very sturdy feeder is made of heavy-gauge steel and holds 2 1/2 gallons of seed. At \$65.00 it is expensive, but mine has lasted for more than five years and is still going strong. One minor drawback is that the wooden perch needs to be cleaned frequently. Another drawback is that this feeder is heavy even when empty. Either mount it on a post or hang it from a large branch with a strong chain or heavy hook.



The plastic dome on the Droll Yankees Big Top feeder, above, protects the seed from rain and snow, keeps squirrels out, too. At left, here's another type of squirrel baffle, installed over a tube feeder. Note the metal fittings on the feeder-impervious to gnawing teeth.

Winter 1995 29



A Pyrrhuloxia checks out the dinner menu at a platform feeder. This simple feeder is attractive to ground feeding birds, but keep the platform clean to avoid spreading disease.

well in only a relative handful of styles (see the sidebar for some specific recommendations). Tube feeders are an excellent choice. They're made of heavy plastic with metalreinforced feeding holes, perches, and caps, and come in a range of sizes. One advantage is that the larger birds some people consider undesirable, such as jays, can't fit onto the perches; many tube feeders are made with removable perches or none at all, so that only small, clinging birds can feed. Tube feeders often come with an attached seed tray to catch dropped seed and hulls. Although a tray does make it easier to clean up around the feeder, the hulls tend to block the drainage holes, leading to a smelly, moldy mess. In addition, squirrels and large birds find the tray a convenient perch. The major drawback to tube feeders is that the filler caps—even metal ones with clever attachment devices—are vulnerable to squirrel attack. Once a squirrel figures out how to get the cap off, the feeder is doomed.

Dome feeders are another excellent choice. The clear plastic dome over the seed bin deters squirrels, protects the seeds from the elements, and excludes larger birds.

For sturdiness, capacity, and pest deterrence but not aesthetics-my personal choice is a counterweighted feeder. These hopper-style feeders are made of metal with an adjustable, counterweighted perching bar. When squirrels or heavy birds such as crows sit on the perch, their weight brings down a shutter that seals off the seeds.

Bubble feeders—ball-shaped hanging feeders designed for small birds—are cute and effective but don't hold much seed.

For sheer enjoyment, window feeders are great. Most are quite inexpensive and simple to install—they attach to the glass with suction cups. They don't hold much seed and are defenseless against squirrels, but you do get a marvelous close-up look at the birds. One morning last winter, I glanced out at the hopper feeder in the yard and saw what I thought was the usual mob of House and Purple Finches. But when I watched the birds up close at the window feeder in the kitchen, I realized that some were actually Red Crossbills—a first for my backyard.

#### KEEPING IT CLEAN

When birds crowd together at bird feeders, the risk of spreading disease increases. Bird droppings can contain parasites and infectious microbes; moldy seeds can also cause disease. To help keep the birds healthy, keep the feeder clean and the seed dry. Rake up spilled seeds and hulls under the feeder. If you notice dead or obviously ill birds near the feeder, stop feeding at once. Discard the seeds in the feeder, clean up around the area, and wash all parts of the feeder thoroughly, even the hanging chain, with a diluted bleach solution—one part bleach to nine parts water. Wait a few days before you put the feeder up again.

#### THE RIGHT FEEDER IN THE RIGHT PLACE

The real reason we feed birds is that we like to watch them. So when you're deciding where to put your feeder, place it where you can see it, and at a height that makes it easy to refill. One of my feeders hangs at a convenient height in the summer, when the leaves weigh the branch down: but when the leafless branch rises up in the winter, I either have to move the feeder or haul a step stool through the snow. Nature teaches us to be efficient in expending resources: I move the feeder.

To attract birds, place the feeder about 10 feet from natural shelter—trees, hedges, shrubs, or bushes. This gives the birds a protected place to perch while they await their turn at the feeder. It also provides a place to hide from predators such as hawks or cats.

The birds should spot your new feeder within a few days. If they don't, or if only a few birds come, try sprinkling some seeds on the ground around the feeder. Often, however, the solution is to move the feeder—it may be too exposed. If you notice that the seed in the feeder is getting blown out or wet, move it to a more sheltered spot. If the birds must cross a large, open area to reach the feeder, move it closer to a tree or shrub; sometimes a difference of just a few feet is all that's needed. You could also plant some greenery near the feeder, or better yet, add a brush pile (a loose heap of branches). I was amazed at the difference this made at my feeders, even though my yard was already full of natural vegetation. The number of birds seemed to double overnight.

#### Avoiding Window Strikes

The awful thump of a bird crashing into your window is a sound you don't want to hear. One major cause of window strikes is reflections. A bird sees backyard greenery reflected in the window and thinks it is flying into open space, only to be brought up short by the glass. Sometimes windows on parallel sides of the house create a "show-through"; the bird thinks it has a clear passage. And sometimes territorial birds spot their own reflections in a window and try to chase away the "intruder." A male cardinal used to furiously chase a "rival" from a window in my study every morning around 10 o'clock. As he rounded the corner. his reflection disappeared and the bird flew off, convinced he had ousted the intruder.

Fortunately, window strikes are easy to prevent. Try moving the feeder a bit, so that birds approach and leave it from a different direction. Or place something in the window—wind chimes, house plants, commercially available hawk silhouettes—to break up the reflections. If territorial birds are a problem, try exterior window boxes to cut down on reflections. (A window box full of blooming red geraniums convinced my cardinal he had won for good.) Stop show-throughs by closing the curtains or shades on one of the windows. When nothing else works, some people hang netting (the kind that's sold for protecting fruit trees) in front of the window. The birds still hit, but at least they don't get hurt.

#### SQUIRREL-PROOFING YOUR FEEDER

The most important thing to remember about squirrel-proofing a bird feeder is that you can't. No matter how ingenious the device, no mat-

ter how vigilant your squirrel patrols, no determined squirrel can be kept off forever—and squirrels are *very* determined. But with a combined strategy of baffles, resistant feeders, and diversion feeding, you can keep damage to feeders and loss of seed to a minimum.

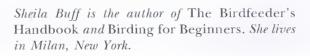
Sliding, tilting, or bowl-shaped baffles placed

above and below the feeder deter squirrels climbing up the pole or down the chain, but not squirrels jumping on from the side. Squirrels can jump astonishing distances from a standing start, so position the feeder at least 5 feet off the ground and at least 10 feet from launching points such as tree trunks, decks, porches, window sills, and eaves. This arrangement is hard to accomplish in the average backyard. Also remember that squirrels overcome obstacles by eating them—be sure your baffles are made of metal or very tough plastic.

Even if you select one of the few genuinely squirrel-resistant feeders listed in the sidebar, pesky squirrels will keep hanging around the feeder. You can chase them off by yelling or letting the

dogs out, but they'll be back in moments. Our squirrels give our dogs a sporting 15 yards before bothering to run.

Try diversion feeding: offer the squirrels whole corn kernels (loose or on the cob) in their own feeder, as far away from the bird feeder as possible. Our squirrels were quick to realize that an easy hand-out was a better deal than gnawing through plastic baffles to get sunflower seeds. Although they still mount an occasional raid on the bird feeders just to keep in practice, for the most part they stay away. For me, diversion feeding is proof again that harmony is nature's way.





"Oh boy, lunch!"
This flimsy,
unbaffled, stringsupported feeder
won't last long.
Squirrels are agile
and persistent, so
mount your feeders
far from squirrel
launching points—
and try distracting
the rodents with
some food of their
own.

#### THE ART OF SCIENCE

by Cynthia Berger

#### Ornithologist John O'Neill discovers birds; then he paints their portraits

hen John O'Neill talks about what he hopes will be his twenty-seventh expedition to Peru, his eyes light up behind his wirerimmed glasses and his soft, Texas drawl speeds up a bit. "Let me show you," he says, rummaging in a corner of his comfortably cluttered Baton Rouge, Louisiana, living room. He extracts an enormous, rolled-up map, the classroom kind that goes up and down like a window shade. Pushing aside piles of books, he kneels, shakes out the map on the floor, weights the curled edge with a copy of The Pelican *Brief*, peers at the fine print, and runs his finger lovingly along the blue lines that lead to discovery.

Peru's 1,708 bird species have been the focus of O'Neill's life since he visited the country as a college freshman in 1961. In 26 expeditions O'Neill, now 52, has discovered 12 new species-more than any other living ornithologist. His contribution to knowledge of the distribution and taxonomy of South American birds is vast. Writer Don Stap, who describes an O'Neill expedition in his recent book, A Parrot Without a Name, says, "It is virtually impossible to find a major paper of the last 15 years on neotropical ornithology that does not have a reference to O'Neill."

John O'Neill doesn't just discover birds, however. He also paints their portraits, with a scientist's precision and an artist's inspired vision. Roger Tory Peterson has said, "The fact that John is so equally talented means he must make a decision on what he wants to do—spend time painting or working on biology."

Since 1987 the former director of the Louisiana State University (LSU) Museum of Natural Science has decided to spend most of his time painting. His work appears in books, journals, magazines, and museums such as the Leigh Yawkey Woodson, known for its exhibits of bird art. It's also in best-selling field guides such as the National Geographic Society's Field Guide to the Birds of North America and the National Audubon Society's Master Guide to Birding. "I feel a debt to ornithology to do the field guides," he says.

A few paces from the unrolled map, a hall leads to the converted bedroom that is O'Neill's studio, its worktable cluttered with squeezed-up paint tubes. Earlier in the visit O'Neill rifled through the portfolios stacked against the walls, showing off some of his current projects: "Here's a Gambel's Quail, for a book I'm doing on Texas birds—I'm originally from Texas—oh, this is an Archaeopteryx; I did that for The Age of Birds, a book on ancient birdlife by Alan Fedducia. He was an LSU undergraduate and went on some of the

Peru trips. Somewhere here I have stuff I'm doing for a new North American field guide—it's being published by Simon and Schuster for the National Wildlife Federation—and here's a fun one, a commissioned portrait of a pet Yellow-headed Parrot that belonged to a friend."

Another project is *Birds of Peru*, a major monograph covering all 1,708 species. It's the culmination of 25 years of fieldwork by O'Neill and the late Ted Parker, as well as dozens of other LSU staff and associates. O'Neill has already completed some of the plates (artist Larry McQueen is working on the others); now he's focusing on the species descriptions and seeking funding to finish this monumental work.

Yet on top of these commitments, O'Neill is submitting a proposal to the National Geographic Society for another Peruvian expedition. "I can't be full-time art, and I can't be full-time science, because I like 'em both," he says. "So I keep doing both." Later he will add, "My age is advancing. I'd better start getting into the field a lot."

Now he finds the place he's looking for on the map. "These mountains, the Cordillera Azul, lie between two of the largest rivers in the country, in a huge area of Peru about which nothing is known." Isolated ridges, separated from the main bulk of the Andes mountains, often hide unique plants and animals, species that have evolved in isolation. So new birds are a real possibility on this trip. "In recent years, Peru has gone from one of the most poorly known to one of the best-known countries, in terms of birdlife," O'Neill says. "Now I have an even greater desire to finish the puzzle."

Searching geographically isolated areas is a theme of O'Neill expeditions. Ken Rosenberg, now chief scientist for the Cornell Lab of Ornithology's Bird Population Studies program, was a graduate student at LSU when he accompanied O'Neill on the 1985 expedition. "John would always be staring at the map," Rosenberg remembers, "looking for something geographically interesting." The 1987 expedition, the one Stap describes in A Parrot Without a Name,



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remembers, "but the pheasants really set me off raising birds. From then on 1 raised all sorts of things—doves and finches, poultry, fancy pigeons."

He had already started painting, with some half-used, cast-off tubes of oil paint. "I just kept at it," says O'Neill. "The only time my mother was ever called in for a school conference was because I was drawing when I should have been paying attention."

On a high school birding trip to Baton Rouge O'Neill met then-director of the LSU museum, George H. Lowery, Jr., who signed a copy of his just-released book, *Louisiana Birds*. Neither one imagined that the student would one day step into the scientist's shoes. "I never thought much about the consequences of studying birds," says O'Neill. "It was just something I was determined to do."

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Searching geographically isolated areas for new bird species is a theme of John O'Neill's expeditions. Above, O'Neill in 1985 at a field camp in the Peruvian Andes.

university museum and casually critiquing his paintings.

His first week at college, at a local bird club meeting, O'Neill met his Peru connection: an older couple who, later on, announced their plans to spend a year in Peru and casually invited him to visit. "A lot of times people just say something like that," grins O'Neill, "but I didn't let it pass. I said yes as fast as I could."

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JNITED STATES

Kouge, Louisiana, living room. He extracts an enormous, rolled-up map, the classroom kind that goes up and down like a window shade. Pushing aside piles of books, he kneels, shakes out the map on the floor, weights the curled edge with a copy of The Pelican Brief, peers at the fine print, and runs his finger lovingly along the blue lines that lead to discovery.

Peru's 1,708 bird species have been the focus of O'Neill's life since he visited the country as a college freshman in 1961. In 26 expeditions O'Neill, now 52, has discovered 12 new species-more than any other living ornithologist. His contribution to knowledge of the distribution and taxonomy of South American birds is vast. Writer Don Stap, who describes an O'Neill expedition in his recent book, A Parrot Without a Name, says, "It is virtually impossible to find a major paper of the last 15 years on neotropical ornithology that does not have a reference to O'Neill."

John O'Neill doesn't just discover birds, however. He also paints their ornithology to do the field guides," he says.

A few paces from the unrolled map, a hall leads to the converted bedroom that is O'Neill's studio, its worktable cluttered with squeezed-up paint tubes. Earlier in the visit O'Neill rifled through the portfolios stacked against the walls, showing off some of his current projects: "Here's a Gambel's Quail, for a book I'm doing on Texas birds—I'm originally from Texas—oh, this is an Archaeopteryx; I did that for The Age of Birds, a book on ancient birdlife by Alan Fedducia. He was an LSU undergraduate and went on some of the

tains, the Cordillera Azul, lie between two of the largest rivers in the country, in a huge area of Peru about which nothing is known." Isolated ridges, separated from the main bulk of the Andes mountains, often hide unique plants and animals, species that have evolved in isolation. So new birds are a real possibility on this trip. "In recent years, Peru has gone from one of the most poorly known to one of the best-known countries, in terms of birdlife," O'Neill says. "Now I have an even greater desire to finish the puzzle."

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explored the Cordillera Divisor, a mountain "island" 100 miles from the Andean foothills that yielded a new species of parrotlet.

Another hallmark of O'Neill's work is his collaboration with Peruvian scientists. He includes Peruvian students on his expeditions and often works with Irma Franke, the curator of birds at Peru's natural history museum in

Lima. "Everything we do now is 50-50 with the museum," he says. "It's good to see—students and young professionals are becoming so interested in conservation science that they're influencing Peru's laws."

O'Neill leaves the map on the floor when he returns to his armchair to talk about the roots of his interest in birds and art. The Yellow-headed Parrot he's painting now is a piece of his personal puzzle: from the parrot's owner, back in the early 1950s, O'Neill's godfather purchased three Golden Pheasants—a gift for a seven-year-old boy who'd just moved to the Texas countryside with his parents. "I already had some bantam chickens," O'Neill

remembers, "but the pheasants really set me off raising birds. From then on I raised all sorts of things—doves and finches, poultry, fancy pigeons."

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Another high school trip, to eastern Mexico, crystallized O'Neill's interest in tropical birds. He had previously read *Mexican Birds: First Impressions*, by George Miksch Sutton. "So after the trip I applied to the University of Oklahoma, where Sutton was teaching," says O'Neill. The artist and ornithologist treated him like a graduate student, giving him desk space at the

Orange-throated Tanager, came on his third trip, when he was still an undergraduate.

O'Neill earned his Ph.D. at LSU in 1974, then worked in the museum, first as a curatorial assistant, and then as chief curator, while continuing to travel to Peru each year. "I was also painting a lot by then," he says; he did the plates for Richard ffrench's



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NEW NEW TO A KOSENBENG

## THE UNSCIENTIFIC METHOD

by Mel White

#### Who cares about a dime-a-dozen bird with a hurt wing?

hen a lawyer gets The Rescue Call, it's somebody whose son smarted off to the cops. For a doctor, it's anxious parents with a feverish baby. For birders, it's The Cardinal with the Hurt Wing, and I suppose we should feel lucky. Given the habits of birds, our phones usually ring at a reasonably decent hour.

"We got home from work and found a cardinal on the patio, and it was acting real funny, you know? We remembered that you like birds, so we thought we'd call you up and ask you what to do. We think it has a hurt wing."

Never a concussion, or syncope, or senility. Always a hurt wing.

For many years I had a standard response for these calls. It was partly true conviction, but mostly, I know now, just a pose. I was trying to show that birders weren't bleeding-heart effetes, "bird-lovers" who went into a dither about anything with feathers.

"Okay, I'll tell you what to do," I'd say. "You willing to devote a little time to it?"

"Uh, sure."

"Okay. First, decide how many hours you'd spend on this. Then figure out how much your time is worth. Ten dollars an hour? Fifty? Multiply that out. Now sit down and write a check to The Nature Conservancy, and send it in with a note telling them to buy land somewhere. And forget the dumb bird."

Confused silence. "But... I hate not to do anything for it. It seems like such a waste. It's so beautiful."

"Yeah, I know. Look, I don't mean to sound cold-blooded or anything"— actually, of course, that was exactly how I meant to sound—"but cardinals are a dime a dozen. That pair in your backyard has three broods a year, four or five eggs every time. If they all lived, we'd have to start spraying for them. We'd have to put cardinal-excluding doors on our houses. If you really want to do something worthwhile, help save some habitat somewhere. Let's face it: ten million birds die every day."

Oh yeah, I'm sure those people hung up the phone with a whole new impression of bird watchers. Namely, that some of us are heartless, didactic jerks.

It's still a puzzle to me, given my attitude, how one summer day I ended up with a flightless kingfisher. It must have been the novelty of the circumstance—not a cardinal or a robin, but a two-for-a-quarter bird, at least. Friends had found it in their yard downtown. How on earth did it get there? When I went to have a look it was sitting in the corner of a cardboard box, crest raised, full of spunk but helpless. Its wing was hurt, I think.

The day before, this little critter had been the ratchet-voiced terror of the bayou, and now it was lost, far from home in more ways than one. On the way to the vet's office it sprawled in the box, looking unavoidably frumpy, but scrappy, wide-awake, alert as a mad rattle-snake. Obviously, the problem was purely mechanical.

After laughing at the sardines my

friends had put in the box, the vet wasted no time on irrelevant emotion. A bird like that, he said, has bones too small to fool with. It's not an eagle or anything. There's really only one thing to do.

I couldn't walk away from my part in the deed. Even a crippled kingfisher could do some damage with that wicked long bill, so I had to hold it for the injection. I felt its heat and muscle in my hands as the vet's syringe sucked poison from a vial; small nerves protested the needle.

Its eyelids fought against closing. The dying of the light came with two nods of that bushy head, the second limp and irrevocable. Ten million and one.

And so long, scientific detachment.

When I was a kid my neighbor, a pioneering and hard-working conservationist, avidly trapped House Sparrows and chloroformed them by the double handful in a two-gallon pickle jar. Looking on, I thought: You bet. Save the bluebirds.

Why, then, was this kingfisher different? I think of the defiant fire in its eye—the way, despite its hurt, it seemed only too ready to spindle my hand like a piece of cheese—and, especially, the binary finality of its quick death. On, off. Alive, not alive. There. Not there.

Banders handle wild birds all the time, but it's a rare thing for most of us. Especially rare, for me, to hold another one so soon after. The day it happened, I was helping a disparate bunch of biologists, researchers, and land managers work with Red-cockaded Woodpeckers in a patch of pine woods in eastern Arkansas, counting and identifying individuals and trying to figure out where they were roosting.

As most birders know, the Redcockaded Woodpecker is a genuinely endangered species. From Maryland to eastern Texas, scattered populations nest in mature living pines with "red-heart" disease, a fungal infection that makes the trees' wood easier to excavate. The woodpeckers need open, park-like pine stands, without small trees and shrubs cluttering up the understory—conditions once maintained by fires that regularly swept through the great woodlands of the South. Today, the big timber conglomerates cut down most of those woods long before the trees get old enough for the woodpeckers, and foresters suppress fire with all the fervor that preachers

in the little piney-woods churches go after sin.

Even in the context of the species' precarious situation, the tiny population at Pine City is teetering on the edge. Separated by miles of swamp and row crops from any other suitable woods, their home is an isolated 160-acre tract set aside as a preserve specifically for them. It's not great habitat, but unless they join a colony of Red-winged Blackbirds and learn to eat rice it's all they've got.

On an energy-expended-per-ounce-of-biomass basis, an awful lot of effort has gone, for many years, into helping these beleaguered birds. Crews clear underbrush from around roost trees and set prescribed fires to discourage hardwoods. They nail wide aluminum bands around trees to repel snakes, and install metal restrictor plates to keep Pileated and Red-bellied Woodpeckers from enlarging and usurping cavities.

Much of this is volunteer labor, these work parties and censuses, trying to give the birds every possible chance to hang on. Some of the work takes place on weekends, when other activities compete for people's time. It's not easy to recruit helpers: you need to be there at dusk to see the woodpeckers come to roost, and it's a long way to drive to spend Saturday night swatting mosquitoes and brushing off ticks. Despite all

the work, the birds' numbers here have dwindled into the single digits—recently, the low single digits—as was perhaps inevitable in such a confined and genetically exiled population.

I probably haven't helped with the birds as much as I should, but when I did I sometimes found myself thinking: Would all this work have been better directed somewhere else? Logically, would it have been more productive to spend those hours improving the habitat around one of the state's healthier populations, in a kind of conservation triageor working for more enlightened timber management? Should we have given in to the inevitable and just let these last few birds go?

I was watching a re-

searcher band a male woodpecker that day at Pine City when he held it out to me and asked if I wanted to release it. I would be joining a very select set of people, he said with mock gravity, who've actually touched a Red-cockaded Woodpecker. I laughed and took the bird, and as I felt the frantic metabolism inside the fluff I remembered the kingfisher I had picked up not long before. It would be overdramatizing things to call my thoughts then, as I opened my hand and the bird flew away, an epiphany; they were simply part of an evolutionary change. Somehow, sometime, I began to consider the difference between method and motivation, and to understand that I must not confuse them.

still think an acre of habitat is more important than one dickey-bird. But I don't make fun any more of people who want to stay up all night feeding a baby robin with an eyedropper.

I know that large-scale habitat protection plans are vital for the future of many species. But I'm not so quick to criticize the priorities of people who spend their time fighting to save a few shade trees while Congress decides the fate of millions of acres of wild lands. A conservationist is somebody who decides to draw the line someplace, and it just might be that the simplest, most atavistic instincts and emotions inside us—

the joy in life and the sadness in death, even the death of one backyard bird—are more important and more persuasive than reason and research in giving us the will to do it.

These days, the people I'm most skeptical of are the biologists (and birders) whom I've been with in the field and whom I've never seen stopped in their tracks by the sheer unquantifiable beauty of a Hooded Warbler or a Scarlet Tanager—or, for that matter, of a cardinal. And the attitude I'm most wary of is one that's indifferent to the fate of a single bird, or an isolated population, because I don't know how far down the slippery slope of pragmatism it might be willing to go.

These days, when somebody asks me why we should save the Spotted Owl or the prairie mole cricket or the smallheaded pipewort, I don't always feel like relying on science and logic. I don't always feel the obligation to elucidate ecosystems and indicator species and biodiversity and the interrelatedness of living things, et cetera.

"I'll tell you how come," I say. "Because God put 'em here. What the hell makes you think you've got a better idea?"

It's an answer that, to be most persuasive, ought to be given with a certain defiant gleam in the eye—and I always know where to go to find it.



"The day before, this little critter had been the ratchet-voiced terror of the bayou, and now it was lost, far from home in more ways than one."

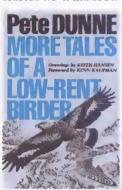
#### Critics, Corner

#### MORE TALES OF A LOW-RENT BIRDER

by Pete Dunne

Austin, Texas: University of Texas Press; 1994. Cloth, 120 pages, \$18.95.

t was déjà vu all over again as I Lopened Pete Dunne's latest book, More Tales of a Low-Rent Birder. There they were again, those bizarre birding stories we'd labored over at Living Bird,



struggling to make sure that all the periods and semicolons were in the right place. How well I re-"The member Devil List," "The Wisdom of the Worthies," "The Art of Pishing, and several other

gems that first appeared in Pete's "Catbird Seat" column. And then I read further and found a dozen or so essays I'd never seen before.

Pete's admirers—and I include myself among them—will appreciate this book. It rounds up some of his best writing from Living Bird, American Birds, Bird Watcher's Digest, and the New York Times into one convenient hard-bound volume, attractively illustrated with pencil sketches by Keith Hansen.

I think what I like most about this book is that it provides a more complete view of Pete Dunne than you could get from reading the essays singly as they appear in magazines and newspapers. You might have the impression from reading one or two "Catbird Seat" columns that Pete is the consummate wisecracker, poking fun at the foibles we all share as birders (and no one is a more effective heckler than Pete Dunne). But he is more than that. He is a person who cares deeply about the condition of the natural world, birds in particular. This is evident in the first essay, "A Golden Plover at Ebb Tide," in which he traces the short life of a migrating plover and its untimely doom on a New Jersey beach. In "The Song of Killing," he looks at a Great Horned Owl's attack on some mice and ponders the meaning of predation in the scheme of the universe.

But Pete is most at home when he's writing about birding. In "Silver and Gold for Josephine," Pete provides the best explanation I've ever read of why people watch birds. And in "The Devil List," he offers a hilarious view of what happens if you get too obsessed with listing.

You may have guessed from seeing the "More" in the title that this book is a sequel—the earlier book, Tales of a Low-Rent Birder, was published in 1986. If you like More Tales of a Low-Rent Birder, you'll be happy to know that the University of Texas Press is also publishing a new, paperback version of the first book. If you weren't a fan of Pete Dunne's before, these books may well convince you to become one. - Tim Gallagher

#### EASTERN BIRDS: A GUIDE TO FIELD IDENTIFICATION OF NORTH AMERICAN SPECIES

by James Coe

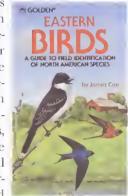
Racine, Wisconsin: Golden Press; 1994. Paper, 160 pages, \$10.95

**V**/hen I was first handed a copy of James Coe's new field guide, aimed at novice and casual birders, I was skeptical; I had seen too many

poor attempts with inaccurate illustrations and misleading text. After just a few seconds of glancing through this book, however, I was truly impressed; not only were the illustrations beautiful, they were some of the most accurate depictions for many species that I have seen in any field guide.

In an effort not to confuse or intimidate beginning birders, Coe

keeps his plates uncluttered, with relatively few species pictured per page. Birds are depicted in lifelike poses, often against naturallooking backdrops, rather than the more traditional "cookie-cutter" arrangements used



by other field guides. Subtle differences in shape and posture are captured with surprising accuracy, and insets illustrating birds in flight or typical behaviors add to both the aesthetic appeal and the usefulness of the plates. The brief text provided for each species (on the facing pages) offers interesting tidbits on habitat or behavior, but is variable as to whether vocalizations or plumage variations are described. The tiny range maps are accurate, but generalized, and are curiously omitted for quite a few species.

The most innovative feature of this guide is a series of "master plates" that illustrate either typical bird habitats filled with the species most likely to be seen there or groups of similarlooking species, all cross-referenced with page numbers to the main plates. My favorites are four plates of "confusing songbirds" that compare, for example, unrelated but similar brownish and streaky or greenish birds with eyerings and wing-bars. These illustrations are so accurate and helpful, they are worthy of inclusion in even the most "advanced" field guide. With these plates, plus insightful and easy-to-read introductory sections covering "bird watching basics," this guide admirably fulfills its goal of reaching out to the novice birder.

My criticisms of this book center on what was left out, namely about one-third of the bird species occurring in eastern North America. Admittedly, some of these additional species are only accidental strays, but many are common or widespread enough to have warranted inclusion. When I evaluate a new field guide, I always check a set of difficult-to-identify species that are often poorly illustrated in many guides. This list includes Philadelphia Vireo, Lincoln's Sparrow, Connecticut Warbler, and Baird's Sandpiper—species that nearly always stump the novice who stumbles upon them. This guide's solution to these problem species was simple omit them completely! Not even a mention of their existence; to the blissful beginner who uses this book, only three species of large gulls need to be sorted out, there are only two Empidonax flycatchers and only four kinds of sandpipers, and jaegers don't even exist!

This book was produced under the

false (in my opinion) assumption that beginning birders don't want to know the full range of species they can see and identify. When I showed this abridged guide to several novice and casual birders here at the Lab of Ornithology, their reactions bordered on anger. "Nothing is more frustrating than seeing a bird and not finding it in the book," was a typical comment. Most admitted they would have tried to "fit" their unknown bird into one of the species illustrated. And everyone I asked agreed that they would prefer a slightly larger, more complete guide that at least mentioned all the possible species they could

The real shame is that Coe's impressive talents are compromised by the incompleteness of this work. The artist's innovative yet accurate style could have made many more bird species accessible to beginners. Ironically, for example, a birder armed with this guide could easily separate juve-

nile dowitchers (long considered one of the stickiest identification problems in North America) but wouldn't know an adult Pectoral Sandpiper if it walked within 10 feet. I'd love to see Coe's rendition of Philadelphia Vireo or Lincoln's Sparrow. In my experience, what beginners crave is accurate and up-to-date information, presented in a straightforward and friendly style; they will only be handicapped by an abridged and oversimplified view of bird identification challenges.

My final assessment is a qualified "one thumb up." I urge the publisher and the artist/writer to consider expanding this guide in future editions to include at least all the breeding and regularly occurring migrant species in the region covered. Until then, novice (and more advanced) birders will learn much from this book, but will be forced to carry a second field guide as a backup for any species "not in the book."

-Kenneth V. Rosenberg

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#### A FLICKER DAY, FOR SURE

by Pete Dunne

he trees were touched with autumn and the branches were bowing to the wind as I headed up the drive to New Jersey Audubon's Scherman Hoffman Sanctuary. Along the way, bigbodied birds exploded into motion, flashing yellow underwings and telltale white rumps.

Going to be a flicker day on the phone, I thought, even before I parked. You spend nearly 20 years in the old natural history racket and these insights come easily.

I don't know what it is about nature that paralyzes homeowners. Maybe it's cultural estrangement; maybe it's this age's reverence for the "expert opinion," but every time somebody's suburban tranquillity is shattered by an encounter with Ma Nature, the person runs to the phone and calls The Nature Center Naturalist! In this age on this planet, naturalists are the arbiters in any conflict between man and nature.

The ones who tell the painters how long it takes House Finches to hatch and fledge: "Sorry guys. Better come back and paint the porch later."

The ones who can talk a fistful of baby robins out of a possessive six-year-old's grasp, convince a 92-year-old park patron to stop throwing white bread to the ducks, and listen to a caller's description of a bird that is "orange and white and big as a crow, with a sharp beak, long legs, no tail, and circles all around its face" and still correctly identify it as a Killdeer.

Put some average naturalists in a sensory deprivation chamber, leave them stranded for six months, then plug them into a nature center phone line, and they'll be able to tell you the date (within a week's variance) in three calls or less.

Here in New Jersey the crisis-call calendar begins in February with the old "Kamikaze cardinal throwing itself against the window" call.

"No, ma'am, the bird is not trying to break into your bedroom. It's just seeing its reflection in the window and defending its territory from a perceived rival."

In March the calls move on to woodpeckers that drum a morning tattoo on drainpipes, in April to House Finches that fuse screen doors shut with their nests, in May to domestic-minded Barn Swallows that undermine the aesthetic integrity of garage parked cars, before moving on to the seasonal flood of "BBCs" (baby bird calls) that command the summer months.



And then comes October and in suburban neighborhoods, all across America, residents wake up, look outside, and see this strange bird . . .

"It's all brown with black spots," they explain. "It has a red patch on the back of its head and a great big black V on its chest. It's been sitting on my lawn all morning and . . . "

Not all callers that nature centers entertain are cordial. I recall one irate homeowner, who lived near the Stone Harbor Heron rookery, who was incensed that a big white bird was standing in his driveway. He demanded, "as a taxpayer," that I come and remove the bird.

My elaborate reply involved the essence of free will, an exploration of Great Egret fledging behavior, and a lecture on the importance of self reliance and self determination in American culture.

He still insisted that I come and remove the bird.

I went on to explain the subtle differ-

ence between tax-supported government agencies and tax-exempt research and education facilities, at which point he screamed that he would "have my job for this" and then hung up.

Honesty compels me to admit that not all the responses nature centers make to pleas for assistance are cordial, either. I recall one harried director of a coastal research center who impetuously and inopportunely answered the phone one day. After five minutes of not being able to get a word in edgewise, and then learning that the injured bird compromising his schedule was "a blasted pigeon," the director (who was, oh-by-the-way, a marine biologist, not a birder) suggested that the caller "step on its head!"

That center's funding, needless to say, was heavily endowed—not dependent upon contributions from the general public.

While I understand the time constraints of busy nature center directors, I always try to be cordial to crisis callers, even when I cannot be helpful. But I have demands upon my time, too. When I get to work at 7:30 A.M., my docket is clogged. Calls that come in before regular work hours are dispatched with alacrity.

Sure enough, the phone was ringing when I put my key in the door. It continued to ring as I went into the kitchen and started brewing coffee. It stopped, then started again as I moved for my office. I picked up the phone on the fifth ring.

"It's a flicker," I chanted into the mouth-

"What?" a startled voice inquired.

"It's a flicker," I repeated in my most cheerful voice.

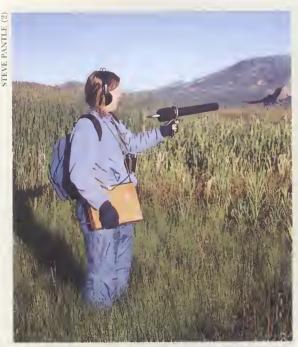
After a stunned silence, the man cautiously inquired: "Is this the Audubon Society?" I replied affirmatively.

"Olı, good," he said. "Maybe you can help me. There's this strange bird sitting on our lawn. It's all brown, with black spots and . . .

No doubt ahout it. A flicker day, for sure.■



#### Learn to Record Bird Sounds



Top photo: Participant Joe Guinn (left) and instructor Dave Herr prepare to record grassland birds at the 1994 Sound Recording Workshop. Above, workshop participant Jeannine Koshear aims a shotgun microphone at a singing bird.

Join the experts from our Library of Natural Sounds for the Lab's annual Sound Recording Workshop (June 3-9, 1995), a unique educational program for recordists of all abilities, from beginners to professionals.

Enjoy individualized instruction during daily field recording sessions in California's spectacular Sierra Nevada Mountains. And see good birds: Sage Thrasher, Williamson's Sapsucker, and Prairie Falcon are just a few of the 150 species we see each year.

Accommodations at San Francisco State University's Sierra Nevada Field Research Campus are rustic but comfortable. Your \$595 fee includes tuition, class materials, ground transportation, lodging, and three hearty meals a day. Most participants bring their own equipment, but a limited number of recording systems may be borrowed from LNS.

Enrollment is limited to 14 in each workshop on a first-come, first-served basis; your nonrefundable \$100 deposit reserves a space.

For more details, write or call the Library of Natural Sounds, Cornell Lab of Ornithology, 159 Sapsucker Woods Road, Ithaca, New York 14850; (607) 254-2404. FAX (607) 254-2439. e-mail: libnatsounds@Cornell.edu

